

INSTRUCTIONAL MANAGEMENT AND ITS RELATIONSHIP TO THE  
CONTEXT OF THE SCHOOL AND CHARACTERISTICS OF THE PRINCIPAL

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by John C. Van Pelt

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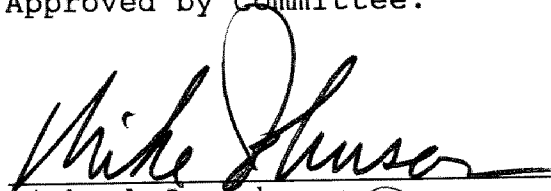
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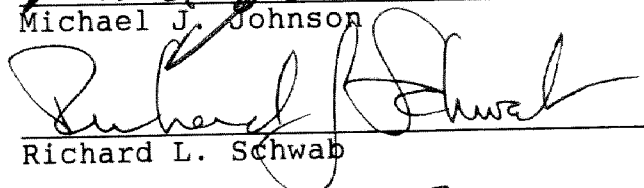
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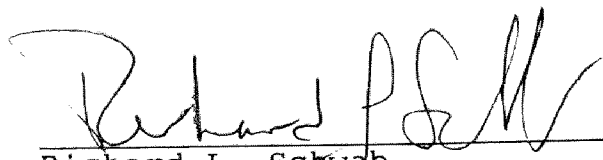
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INSTRUCTIONAL MANAGEMENT AND ITS RELATIONSHIP TO THE  
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An Abstract of a Dissertation by  
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The influence of the principal on the instructional program has been a consistent theme throughout effective schools research. The purpose of this study was to examine the principalship and various factors that may affect instructional management behavior. The following have been identified as factors that may affect principal behavior: school size, socioeconomic status of students, gender of the principal, and administrative experience. The study examined the degree to which each variable was associated with instructional management behavior.

The research design was a correlational study using a survey methodology. A total of forty-four (N=44) schools and 343 teachers participated in the study. Instructional staff members were asked to rate their perception of the frequency with which principals engaged in specific instructional management practices. Multiple regression analysis was performed to investigate the relationships between instructional management behavior and school size, socioeconomic status of students, gender of the principal, and administrative experience.

When the rating scale composite scores were examined, administrative experience was the only variable that was statistically significant. Of the ten subscales included in the rating scale, eight were found to be statistically significant in relation to administrative experience. Eight of the ten subscale scores and composite scores revealed inverse relationships between instructional management behavior and administrative experience. The study concluded that, as administrative experience increases, the frequency with which principals engage in specific instructional management practices appears to decrease.

## Table of Contents

List of Tables.....	iv
Chapter	Page
1. Introduction to the Study.....	1
Background and Rationale of the Problem.....	1
Statement of the Problem.....	3
Foundations: Philosophical and Theoretical	
School as a Social System.....	10
Leadership Behavior.....	12
Supervision.....	17
Purpose of the Study.....	18
Research Questions for the Study.....	21
Null Hypotheses for the Study.....	22
Dependent Variable.....	22
Independent Variables.....	23
Definition of Terms.....	27
Limitations of the Study.....	28
Delimitation.....	28
Limitations.....	28
Significance of the Study.....	29
Implications.....	29
2. Review of the Literature.....	31
Conceptual Framework for the Study.....	31
Effective School Research.....	31

	Synthesis of Existing Studies.....	39
	Limitations of the Research.....	41
	Characteristics of Effective Schools.....	45
	Instructional Leadership.....	47
	Principal Behavior.....	50
	Teacher Perceptions of Principals.....	53
	Organization Size.....	56
	School Size.....	59
	Socio-economic Status of Students.....	63
	Gender of the Principal.....	66
	Administrative Experience of the Principal.....	68
	Contribution to the Knowledge Base.....	70
3.	Methodology.....	72
	Description of the Population.....	72
	Instrumentation.....	73
	Research Design.....	77
	Data Collection.....	77
	Data Analysis.....	79
4.	Analysis of the Data.....	83
	Overview.....	83
	Data Reduction.....	83
	Results.....	85
	Analysis of Subscale Means.....	85
	Analysis of School Composite Scores.....	87
	Assumptions.....	99
5.	Summary, Conclusions, Discussion, Recommendations..	102
	Overview.....	102

Summary of the Study.....	102
Interpretations of the Data.....	102
School Size.....	102
Socio-economic Status of Students.....	105
Gender of the Principal.....	106
Administrative Experience.....	107
Limitations of the Study.....	110
Implications for Professional Practice.....	112
Recommendations for Further Research.....	118
References.....	123
Appendix	
A. Principal Instructional Management Rating Scale....	130

## Tables

Table	Page
1. Summary of Criteria Used to Assess the Adequacy of the Instructional Management Rating Scales.....	76
2. Correlation Matrix for the Relationship Between PIMRS Subscales and Independent Variables.....	89
3. Correlation Matrix for the Relationship Between PIMRS Composite and Independent Variables.....	90
4. Multiple Regression Analysis for Framing School Goals and Administrative Experience.....	94
5. Multiple Regression Analysis for Communicating School Goals and Administrative Experience.....	94
6. Multiple Regression Analysis for Supervising & Evaluating Instruction and Administrative Experience.....	94
7. Multiple Regression Analysis for Coordinating the Curriculum and Administrative Experience.....	95
8. Multiple Regression Analysis for Monitoring Student Progress and Administrative Experience.....	95
9. Multiple Regression Analysis for Protecting Instructional Time and Administrative Experience.....	95
10. Multiple Regression Analysis for Providing Incentives for Teachers and Administrative Experience.....	96
11. Multiple Regression Analysis for Promoting Professional Development and Administrative Experience.....	96

12.	Multiple Regression Analysis for Providing Incentives for Learning and School Size.....	96
13.	Multiple Regression Analysis for PIMRS Composite and Administrative Experience.....	97
14.	Response Rate of Teachers Returning PIMRS.....	98



## CHAPTER 1

### Introduction to the Study

#### Background and Rationale of the Problem

Do schools make a difference for students? Are students learning the academic and social skills valued by American society by virtue of their participation and successful completion of the educational programs offered in the nation's schools? How much influence do schools have in helping students learn the academic and social skills needed to become contributing members of society? These are questions that have been asked and addressed by numerous authors, researchers, and practitioners during the past twenty-five years (Coleman, 1966; Jencks, 1972; National Commission on Excellence in Education, 1983).

In 1966, the Equality of Educational Opportunity Study conducted by Coleman created considerable controversy in the educational community. Coleman's study concluded that schools did not have a significant effect on student achievement when student background characteristics were controlled. From the results of the study, Coleman concluded that:

schools bring little influence to bear on child's achievement that is independent of his [or her] background and general social context; and that this very lack of an independent effect means that the inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront adult life at the end of school (p. 325).

In another study, Inequality: A Reassessment of the Effect of the Family and Schooling in America, Jencks (1972) essentially confirmed the Coleman Report by concluding that "the most important determinant of educational attainment is family background" (pp. 158-159). Jencks defined educational attainment as the highest grade of schooling an individual completes. He went on to state that the overall level of educational resources or school policy does not have much effect on test scores or the educational attainment of disadvantaged students. Perhaps the most controversial conclusion made by Jencks and his co-authors was that "the character of a school's output depends largely on a single input, namely the characteristics of the entering children. Everything else - the school budget, the characteristics of the teachers - is either secondary or completely irrelevant" (p. 256).

Many educators who believed deeply that schools made a difference for students took issue with the conclusions proposed by both Coleman and Jencks. To conclude that student achievement was determined primarily outside the control of schools was simply unacceptable to many people. As a result, a significant body of research was established during the 1970s that attempted to identify and analyze effective schools. Since 1971, there have been at least twenty major studies that have attempted to identify effective schools (Cruickshank, 1990). Research indicated

that when schools were matched with student background characteristics, differences in students' achievement levels could vary significantly (Educational Research Service, 1983). In the process of attempting to identify effective schools, specific organizational, curriculum, and instructional variables emerged as indicators of schools where students perform at higher levels of achievement.

In many of the studies, the school principal was determined to be a critical component in the effectiveness of the school program and achievement levels of students. The potential impact of the principal on the instructional program appears to be a consistent theme throughout effective schools research. Research has stressed the importance of the principal as the instructional leader of the staff and supporter of school program effectiveness. The importance of the leadership role in the improvement of schools was also discussed in the Nation at Risk (1983), where school principals were considered to be crucial to the process of successful reform and improvement in schools.

#### Statement of the Problem

The following statements are supported by a substantial body of research literature on effective schools and instructional leadership (NASSP, 1986):

1. The effectiveness of the educational program depends on decisions and actions made at the school site.

2. The principal assumes the role of instructional leader and is actively involved in all aspects of the instructional program.

3. The school staff develops and utilizes shared goals and high expectations for instructional outcomes.

The principal plays a key role in helping to develop and maintain a school climate that is supportive of a common goal - the learning process (Lezotte, Hathaway, Miller, Passalacqua, & Brookover, 1980). Lezotte et al. (1980) defined school learning climate as the "norms, beliefs, and attitudes reflected in institutional patterns and behavioral practices that enhance or impede student learning" (p. 4). There is considerable research evidence indicating that the principal is critical in creating a school climate conducive to learning (Educational Research Service, 1983).

However, the principal does not work in isolation from other factors that create an effective school learning climate. The school staff, parents, and students all work together for common goals that are supportive of student learning. To function effectively, the goals of the school must be clearly understood and agreed to by everyone who has a stake in the process. Berlin and Cienkus (1989) indicated that "those situations in which parents, teachers, and students are bonded together in the pursuit of learning are likely to be the most productive" (p. 231).

The way education is organized and structured has an effect on the way schools operate. School size may be important because of its potential impact on the social structure, school climate, and influence on the way people interact. As the school size increases, the number of interactions and relationships between staff members change. With what is known about change and human behavior, Berlin and Cienkus (1989) contend that "people seem to learn, change, and grow in situations in which they feel they have some control, some personal influence, some efficacy" (p. 231). The greater the complexity and size of social group the more difficult effective communication and agreement on common goals. The idea that size influences structure can be found in the sociological work of Emile Durkheim (1964). Durkheim (cited in Slater, 1989) argued that:

the unity of the social group is based on like-mindedness of its members, a fundamental homogeneity of outlook and values. This kind of unity depends upon frequent face-to-face communication. As the size of the group increases, face-to-face communication and the sharing of values that it promotes become increasingly difficult (p. 212).

In a national study, Staff Leadership in Public Schools: A Sociological Inquiry, Gross and Herriott (1965) examined the leadership characteristics of elementary principals. The key concept of the inquiry was Executive Professional Leadership (EPL), which the authors defined as "the efforts of an executive of a professionally staffed organization to conform to a definition of his/her role

that stresses the obligation to improve the quality of staff performance" (p. 22).

The study found positive relationships between EPL and staff morale, the professional performance of teachers, and pupils' learning. The study also found a negative relationship between the size of the student body and the EPL score: the larger the student body, the smaller the EPL score of the principal. The negative relationship was statistically significant. Gross and Herriott (1965) concluded that principals in smaller schools may have "more opportunity to develop an understanding of the problems of the organization" (p. 85).

Principals in schools with 600 or fewer students had higher EPL scores than principals in the larger categories. The authors emphasized the need to examine the principal's performance in relation to the context of the social system in which the principal works. Apparently, the number of students in the school, as an indicator of social complexity, had an influence on the leadership behavior of the principal. Gross and Herriott believed the relationship between the size of the student body and EPL had "important educational implications."

School size may have an effect on the organizational and personal factors that influence principal instructional leadership. In referring to Gross and Herriott's (1965) work, Hallinger and Murphy (1985) indicated that "school

size is the only organizational variable consistently associated with principal instructional management activity. Principals in smaller schools (mean = 385 pupils) tend to be more involved in managing curriculum and instruction than principals in the larger schools (mean = 600 pupils)" (p. 235).

Although school size may demonstrate some relationship to the instructional management behavior of principals, other factors may prove to be significant as well. In their discussion of research and methodology, Gross and Herriott (1965) suggested focusing attention on the dependent variable, in this case, instructional leadership, "and then ask what ways of conceptualizing leadership offer the greatest promise of accounting for the variance" (p. 161).

Beyond school size, other factors that may be related to instructional management behavior include the socio-economic status (SES) of the students and community, gender of the principal, and experience of the principal. School size and socio-economic status would be considered the organizational and social context of the school; whereas gender and administrative experience would be considered characteristics of the principal. The study of instructional management would then include organizational, social, and professional factors that may influence the behavior of the principal.

There has been some evidence provided in past research that the socio-economic status of students in the school setting influenced the behavior of the principal. When principals characterized their work, the socio-economic status of students was considered a significant factor. Principals in low SES schools spent their time differently than principals in higher SES schools (Salley, McPherson, & Baehr, 1979). Hallinger and Murphy (1986, 1987b) found that there were differences in the instructional leadership style of principals in effective low SES schools and high SES schools. Principals in effective low SES schools were more directly involved in curriculum and instruction than their counterparts in high SES schools.

Studies that have examined the gender differences in instructional leadership behavior have also proven to be noteworthy. In one study, Gross and Trask (1976) found that the gender of principals resulted in differences in their performance, particularly in the area of instructional program supervision. The authors found that, overall, women obtained more satisfaction from supervising instruction than did men. In another study, women were rated higher by superiors on their knowledge of instruction and gave more consideration to learning situations and teaching than men. (Hemphill, Griffiths, & Frederiksen, 1962).

Evidence on the effect of administrative experience on performance is mixed. At least three national studies found



little relationship between administrative experience and leadership behavior (Gross & Herriott, 1965; Hemphill, Griffiths, & Frederiksen, 1962; Salley, McPherson, & Baehr, 1979). However, when principals were asked about the value of experience in two other national studies (Doud, 1989; Pharis & Zakariya, 1979), a high percentage of principals identified it as the primary reason for their success. Another study by Rousseau (1971) found that principals with high performance levels had more experience than principals with low performance levels. Administrative performance was based on ratings of principals by teachers in several areas, including instructional leadership.

Several studies have identified school size (Eberts et al., 1984; Goodlad, 1984; Gross & Herriott, 1965; Hallinger & Murphy, 1986; Salley, McPherson, & Baehr, 1979); socio-economic status of students (Hallinger & Murphy, 1986, 1987b; Salley, McPherson, & Baehr, 1979); gender of the principal (Gross & Trask, 1976; Hemphill, Griffiths, & Frederiksen, 1962); and administrative experience (Doud, 1989; Pharis & Zakariya, 1979; Rousseau, 1971) as significant factors in the educational program and role of the principal. The consideration of the organizational and social context of schools and the professional characteristics of principals are well documented.

The problem identified in this study may be summarized as follows:

1. Past research has identified characteristics of effective schools.
2. Instructional leadership by the principal has been a consistent indicator of school effectiveness.
3. School size and socio-economic status of students are associated with organizational and social factors that may influence the instructional behavior of the principal.
4. Gender and administrative experience are professional characteristics that may influence the instructional behavior of the principal.

Foundations: Philosophical and Theoretical  
School as a Social System

Sociologists generally view schools as "small societies" (Elmore, 1987). According to Lipham and Hoeh (1974), "the school is a social system whose administration is above all a social process" (p. 48). The systems theory of administration includes the Getzels and Guba (cited in Lipham & Hoeh, 1974) model of administration as a social process. The model spotlights administrative relations as a function of interaction between two major dimensions: (1) the institutional dimension which defines the roles and expectations that will fulfill the goals of the system and, (2) the personal dimension which is influenced by the personality and needs of the individual. Getzels (1958) concludes that the observed behavior of individuals in an organization is based on the interaction between the

institution and personal dimensions. The model suggests the possibility of role conflicts whenever there is a discrepancy between the expectations attached to the role and the needs of the individual. Behavior, as seen by an observer, and about which inferences are made about an individual's performance, is a function of both the situation and the individual (Hemphill, Griffiths, & Frederiksen, 1962).

Getzels, Lipham and Campbell (cited in Lipham & Heoh, 1974) indicate that, in terms of social systems theory, "the school is viewed as a complex, interactive, and dynamic system" (p. 5). Lipham and Hoeh (1974) state that the administration of the school "always functions within the network of person-to-person interaction. Thus, the nature of these interpersonal or social relationships becomes a central factor in the administration of the school" (p. 5).

The concept of organizational culture can be helpful in understanding human systems. Schein (1985) defines culture as:

a pattern of basic assumptions--invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration--that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 9).

Schein (1985) identifies culture and leadership as two sides of the same coin. He goes so far as to state that "the only thing of real importance that leaders do is create and

manage culture and that the unique talent of leaders is their ability to work with culture" (p. 2). Culture is learned and can be changed if one understands the dynamics of the learning process. However, one cannot necessarily assume that organizational culture can be changed by the leader. Schein (1985) contends that "culture controls the manager more than the manager controls the culture, through automatic filters that bias the manager's perceptions, thoughts, and feelings" (p. 314).

Culture is different than organizational climate or values. Schein (1985) states that culture operates one level below these and for the most part determines them. Schein defines culture as "the basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously, and that define in a basic taken-for-granted fashion an organization's view of itself and its environment" (p. 6). He concludes that culture determines the organization's mission and goals.

#### Leadership Behavior

Effective leaders engage in activities that increase organizational effectiveness. The activities in which they engage are reflected in their behavior. Effective leaders:

- (1) adapt their style of leadership to fit the situation or group,
- (2) bridge organizational goals and the needs of individuals,
- (3) focus on organizational climate and,
- (4) understand the process of change.

Leadership effectiveness is determined by both the personality and characteristics of the leader as well as the leadership situation. Contingency theories of leadership assume that leaders who are willing and able to adapt their style of leadership to fit their environment are able to positively impact the behavior and performance of the individuals they supervise. The important contribution of contingency theories of leadership is that no single style of leadership is ideal for every leadership situation (Mazzarella & Smith, 1989).

Sergiovanni (1981) addressed the behavioral aspects of leadership versus the symbolic and cultural aspects. He indicated that the concept of leadership was too closely associated with objectives, behavior, outcomes, and other aspects of measurable effectiveness. According to Sergiovanni, the most important aspects of leadership actually deal with social meanings in organizational culture. The author identified three principles of action that he believes are associated with symbolic leadership:

1. Leadership Selectivity. This action is associated with the activities that receive attention from the leader. How the leader uses time is a form of communication that transmits what the leader values. It is assumed that the leader gives attention to the things that he or she values. Sergiovanni (1981) acknowledged that the leader helps determine the climate of the school and communicates

which activities should receive high priority.

2. Leadership Consciousness. This activity is reflected in the leader's ability to make work meaningful and to provide a sense of purpose for what individuals are doing.

Sergiovanni (1981) concluded that through "defining and articulating the key cultural strands" the leader can provide meaning and understanding concerning the "beliefs, norms, and expectations" of the organization (p. 11).

3. Leadership Fidelity. Sergiovanni (1981) defines this action as "the building of loyalty and devotion to organizational norms and work group" (p. 12). The leader seeks to bring together organizational values and the day-to-day activities of individuals. The leader builds commitment and loyalty to the organization. School goals, mission, and philosophy become more closely matched.

According to Weick (1982), schools are loosely coupled systems. The school staff enjoys relative autonomy in nearly all essential aspects of their work. Motivating staff members to work toward common goals is a major task for the instructional leader. The instructional leader must provide the impetus for defining a common direction for the school staff. As the instructional leader of the staff, the principal must provide the focus for all school initiatives in terms of common goals. Weick (1982) states that this is most likely to happen when school activities are linked

together through common themes and values and when "the administrator articulates a direction with eloquence, persistence, and detail" (p. 675). The administrator of a loosely coupled system centralizes the system on key values. In their research on excellent companies, Peters and Waterman (1982) found that the basic philosophy of an organization had far more to do with their relative achievements than economic resources or organizational structure. Successful companies established a set of beliefs and values which guided all organizational decisions. Companies that did not perform as well were marked by a lack of coherent beliefs and objectives.

Organizations are open systems in constant interaction with their environments. The assumption is that social systems seek a state of equilibrium and that, if any portion of the system changes, other parts of the system will have to change also (Schein, 1985). According to Dykes (1966), "this tendency toward stability, seemingly inherent in all organizations, constitutes a powerful force against change" (p. 30). The effectiveness of change is often directly related to the degree to which members at all levels of the organization are involved in gathering information, assessing needed changes, formulating the goals, and implementing the programs of change (Benne & Birnbaum, 1969). An effective leader must establish an organizational climate that nurtures personal and professional involvement

in the establishment and fulfillment of organizational goals.

According to Lipham and Hoeh (1974), "school climate is the organizational personality of the school" (p. 7). Principals are instrumental in helping determine the climate of the school. As key players in creating a supportive climate, principals have significant influence whenever new or innovative educational ideas are used by teachers. Loucks and Hall (cited in Hopkins, 1990) examined the effects of social climate differences and leadership. The results of several studies concluded that there was a positive relationship between school climate, the individual teacher, and the use of educational ideas. The data indicated that teachers had higher implementation scores when they were self-actualizing and worked in open, democratic school climates. Other factors of the school organization that were found to be significant were the head of the school and consensus on goals. The studies concluded that organizational climate was a factor in the implementation and use of educational ideas and that the school leader was crucial to supporting the use process.

Of all the competencies effective principals possess, the creation of a warm, positive school climate for staff and students may be most important. Effective principals make a difference to teachers and children by maintaining a secure, supportive environment in which to learn.



They maintain strong, collegial relationships with their staff and take advantage of opportunities to praise teachers and students for their accomplishments and achievements.

### Supervision

Principals have a large span of control (Weick, 1982; Lipham & Hoeh, 1974). The typical elementary school principal with an enrollment of 300-400 students supervises 15-24 professional staff. This number does not include the supervision of support staff. The recommended number of subordinates reporting directly to a supervisor is 8-12, but when this range is exceeded, the number of interactions required to manage the organization increases in geometric proportions (Graicunas, 1937). As the size of the school increases, the number of students, teachers, and parents, also increases. Regardless of the size of the school, the principal is expected to conduct staff evaluations, manage the instructional program, and have direct contact with students (Lipham & Hoeh, 1974).

Gulik (1937) indicated that the limits of effective supervisory capability "is partly a matter of the limits of knowledge, but even more it is a matter of the limits of time and of energy" (p. 7). Urwick (1937) stated that "an individual who is coordinating the work of others whose duties interconnect must take into account in his[her] decisions, not only the reactions of each person concerned

as an individual, but also his[her] reactions as a member of any possible grouping of persons which might arise during the course of the work" (p. 54). Urwick concluded that "neglect of the limitations imposed by the span of control creates insoluble problems of coordination" (p. 54).

It is also evident that the principal's relationship with parents and citizens becomes increasingly difficult as the school becomes larger. Individuals and groups of parents often seek out the principal directly for leadership or assistance with their problems (Lipham & Hoeh, 1974). Parental demands to talk with the principal do not decrease simply because the principal is "busy". The number of requests for assistance are greater as the size of the school increases. The greater the number of students, teachers, and parents, the less time available for one-to-one communication and direct contact with individuals.

#### Purpose of the Study

Hallinger and Murphy (1986) have suggested that instructional leadership influences school effectiveness through the establishment of belief structures and school policies that promote a strong outcome-based orientation: a clear mission, instructional leadership, a well-coordinated curriculum, monitoring student progress, structured staff development, high expectations, and an orderly environment.

They have called for an increase in research on instructional leadership that will better describe the relationship between organizational context and effective instructional leadership behavior. They recommended that researchers focus on organizational variables such as school size and other contextual variables to better understand how schools become effective.

According to Hamilton (1983), ecological research attempts to understand both the human behavior and social influences of people and their environment. Ecological studies view schools as systems. Ecological studies include the attitudes and perceptions of individuals as fundamental data. This approach differs from the behaviorist principle that "only visible behavior is worthy of study." Studies of the socialization function of schools show significant differences in student behavior and school climate among schools with students from similar backgrounds. Hamilton (1983) concluded that this "can be attributed to the beliefs and practices of teachers and administrators and how they interact to form a social system" (p. 323).

Most relationships among variables that are sensitive to size become ecological changes for individuals or groups (Weick, 1979). The assumption is that significant change in the school setting depends on the principal. According to Sarason (1971), it is likely that "one can predict an individual's behavior far better on the basis of knowledge

of the social structure and the individual's position in it than on the basis of personal characteristics" (p. 12). The major problems of our schools may have less to do with the characteristics of individuals than with the cultural and system characteristics of organizations (Sarason, 1971).

Eberts and others (1984) examined 287 elementary schools. The size of the schools were from less than 200 students to over 800 students. The researchers found that student achievement in larger schools was substantially lower on average than moderately sized schools, even when controlling for student, teacher, principal, and school climate variables. The results lead the authors to hypothesize that smaller groups of students, teachers, and administrators may facilitate improved coordination of the instructional program. School size may influence the probability that principals exhibit leadership in managing instruction, coordinating the curriculum, and evaluating the school program. Eberts et al., (1984) points out that "school effectiveness literature suggests that these behaviors are linked to greater student achievement" (p. 1).

The primary focus of inquiry in this study is school size and its relationship to elementary principal behavior. However, other factors in the school setting may influence the instructional management behavior of principals. Some studies revealed that the socio-economic status of students,

gender of the principal, and administrative experience may also affect principal behavior. The purpose of this study is to examine the relationships between each variable and the instructional management behavior of the elementary principal. The study will examine the degree to which school size, socio-economic status (SES) of students, gender of the principal, and administrative experience are associated with the instructional management behavior of the principal. Ratings of instructional management behavior of the principals will be based on perceptions of elementary school instructional staff.

#### Research Questions for the Study

1. Is there a relationship between the elementary principal's ability to define the school mission and school size, SES, gender of the principal, and administrative experience?
2. Is there a relationship between the elementary principal's ability to manage the instructional program and school size, SES, gender of the principal, and administrative experience?
3. Is there a relationship between the elementary principal's ability to promote a positive school climate and school size, SES, gender of the principal, and administrative experience?

### Null Hypothesis for the Study

1. There is no relationship between the elementary principal's ability to define the school mission and school size, SES, gender of the principal, and administrative experience.
2. There is no relationship between the elementary principal's ability to manage the instructional program and school size, SES, gender of the principal, and administrative experience.
3. There is no relationship between the elementary principal's ability to promote a positive school climate and school size, SES, gender of the principal, and administrative experience.

### Dependent Variable

The Principal Instructional Management Rating Scale (PIMRS) score was selected as the dependent variable in the study. The instrument was developed by Philip Hallinger and Joseph Murphy (1985, 1987a) and was selected for use in this study because it includes the dimensions of instructional leadership behavior associated with principals in effective schools. The instrument contains 50 statements about principal behavior. The statements include a representative sample of behavior that indicate the degree to which the principal is active in that function. According to Hallinger and Murphy (1987a), principals who are highly rated across various job functions "are perceived as

engaging in instructional management behaviors associated with principals in effective schools" (p. 108). Although the rating scale depends on the perceptions of the instructional staff, other studies have concluded that teacher questionnaires provide valid, reliable data on principal behavior (Andrews & Soder, 1987; Gross & Herriott, 1965; Hallinger & Murphy, 1985).

#### Independent Variables

School size was selected as a variable in the study. This variable was chosen because it may be an important organizational factor in determining the degree to which principals engage in behavior associated with instructional leadership.

Comparisons of staff responses will be made in each school size response category: small schools (between 200 and 350 pupils), medium schools (between 350 and 500 pupils), and large schools (greater than 500 pupils) to determine if there is a relationship between school size and the instructional management behavior of elementary principals. School size response categories were determined by past research and characteristics unique to Iowa. Gross and Herriott (1965) found that principals in schools with 600 or fewer students had higher leadership scores than principals in larger categories. Hallinger and Murphy (1985) found that principals in schools with an average enrollment of 385 students were generally more involved in

managing curriculum and instruction than principals in schools with an average enrollment of 600 students. Eberts et al. (1984) defined small schools as 0-199 students; medium as 400-599 students; and large as schools over 800 students. Study limitations will not allow for schools with an enrollment of fewer than 200 students to be included and there are no elementary schools in Iowa with enrollments of 800 students.

The socio-economic status (SES) of students was also selected as a variable in the study. It has been identified in past research as a factor that may influence the behavior of the principal. Principals in effective low SES schools and effective high SES schools demonstrate varying leadership styles depending on the school setting in which the behavior takes place (Hallinger & Murphy, 1986, 1987b). In a national study of principals and their work, Salley, McPherson, & Baehr (1979) found that principals described their jobs differently, depending on the socio-economic level of the students with whom they worked.

Schools are social systems. School size and socio-economic status (SES) of the students may be important because of their potential impact on the social structure and climate of the school. School size and SES may have an effect on organizational and social factors that influence the instructional management behavior of principals. The socio-economic status (SES) of students in this study will



be measured by the percentage of students in each school who receive free and reduced lunches.

A review of the research on instructional management behavior and the professional characteristics of principals contains substantial contradictions with what have been the conventional hiring practices of many school districts. Although women comprise a majority of the elementary classroom positions, they fill only one position in four as elementary principals (Coursen, Mazzarella, Jeffress, & Hadderman, 1989). In a review of the literature on instructional management, there is no evidence to support hiring men over women. On the contrary, some studies seem to indicate that, overall, women demonstrate significant strengths in the areas of instructional management, teaching methods, and supervision of teachers (Gross & Trask, 1976; Hemphill, Griffiths, & Frederiksen, 1962). If the primary role of the elementary principal is to act as the instructional leader of the staff, then any preference given to hiring men over women has no research to support the practice. During the past fifteen years, hiring practices have changed significantly. Women are being hired in increasing numbers as elementary principals (Doud, 1989).

The gender of the principal was selected as a variable in this study to help determine whether it is associated with instructional management behavior. A random stratified sample will be selected from each school size response

category to include approximately the same proportion of men and women as are represented in the general population of elementary school principals in the state of Iowa.

The effect of administrative experience on leadership behavior is not clear. Some studies found little or no relationship between the experience of the principal and any measure of effectiveness (Gross & Herriott, 1965; Hemphill, Griffiths, & Frederiksen, 1962). However, in two national studies, principals themselves identified on-the-job experience as the most important factor in their success (Doud, 1989; Pharis & Zakariya, 1979). Even though administrative experience may not discriminate between effective and less effective principals, many districts continue to place a high degree of emphasis on administrative experience. According to Hemphill, Griffiths, and Frederiksen (1962), "concern for or sensitivity to instructional problems appears to be unrelated to administrative experience" (p. 335). This variable is an important component of the study because it will help determine whether there is a significant relationship between the administrative experience and instructional management behavior. If no association is found, the study results could be in conflict with conventional wisdom and current hiring practices of many districts.

### Definition of Terms

A review of research on effective school practices and studies of organizations provide definitions of the terms that will be cited in the study.

1. Mission Statement: An declaration of common understanding between staff, students, and community that provides a unifying framework for all school activities and programs (Hallinger & Murphy, 1986, 1987a).
2. Instructional Program: Learning resources, teaching activities, and instructional objectives that are sequenced to facilitate learning and coordinated across grade levels (Northwest Regional Educational Laboratory, 1984).
3. Instructional Leader: An individual who is actively involved in all aspects of the instructional program and consistently gives the highest priority to instructional concerns (Andrews, 1989).
4. School Climate: The norms, expectations, and beliefs of people within a school which govern their behavior (Illinois State Board of Education, 1990).
5. Principal Instructional Management Rating Scale (PIMRS): An appraisal instrument used to assess the instructional management behavior of a principal in terms of specific job behaviors (Hallinger & Murphy, 1985, 1987a).
6. Rater Perception: Judgment or opinion of a professional staff member concerning the frequency with which specific

job behaviors are performed by a principal (Hallinger & Murphy, 1985, 1987a).

7. School size: The number of students enrolled.
8. Elementary School: A school with a K-8 grade span or any kindergarten through grade 6 configuration.
9. Socio-Economic Status (SES): Percentage of students in school who receive free and reduced lunches.
10. Administrative Experience: Number of years a principal has served at the building level.

#### Limitations of the Study

##### Delimitation

The study is delimited to the population of elementary principals in school districts in Iowa. The results of this study are particular to this population and should not be generalized to other school populations.

##### Limitations

This timebound, cross-sectional survey can be generalized only to schools in Iowa who participated in the study, and met the established criteria:

1. Elementary schools with 200-500 or more students
2. Elementary schools with a single full-time administrator serving as a principal.
3. Elementary schools without direct central office support from subject-area curriculum coordinators.

This study depended on teachers' perceptions of the instructional management behavior of the principal.

Responses to the survey were based on specific situations and teachers' own values and judgments.

### Significance of the Study

#### Implications

The purpose of the study is to examine the factors that may influence the instructional leadership behavior of the building principal. The study examines the relationships between school size, socio-economic status (SES) of students, gender of the principal, administrative experience, and instructional management behavior. The results of this study can give school policymakers and researchers greater insight into each of these factors and the extent to which they related to instructional management behavior.

Although research has shown that effective instructional leaders exhibit many of the same attributes, research has also demonstrated that school size and the socio-economic status (SES) of students are contextual factors that may influence instructional management behavior. If the context of the school influences instructional management behavior, this information is worth sharing with principals in university or school district staff development programs to increase understanding of how organizational and social factors may affect their work. Studies that examined the influence of gender and administrative experience indicate that some variation in

instructional leadership behavior was found. Hiring practices for principalships in many districts appear to favor male candidates with administrative experience. At the same time, districts want to hire administrators who possess strong instructional management skills. If no association is found between gender, administrative experience, and instructional leadership behavior, the study results would be contrary to routine hiring practices in many districts. This information may prove to be beneficial to policymakers.

The study will also provide data on how elementary teachers perceive the job functions of elementary principals and their perceptions of principals as instructional leaders. A distribution of averages for each Principal Instructional Management Rating Scale (PIMRS) item will be included in the study. If teacher perceptions indicate that principals in the study exhibit significant strengths or weaknesses, this information may be useful to principals who are involved in professional development programs. Principals participating in the study may want to use survey results to gain greater understanding of their own instructional management behavior. This could lead to significant improvement in schools where principals utilize the survey as a method of self-improvement. It should be noted that only aggregated statistics will be reported in the study.

## CHAPTER 2

### Review of the Literature

#### Conceptual Framework for the Study

The literature review for the study involved sources available through the Educational Resources Information Center (ERIC) and Dissertation Abstracts. Searches related to the topic were concentrated in seven major conceptual areas:

1. Effective School Research
2. Characteristics of Effective Schools
3. Teacher Perceptions of Principals
4. Organization & School Size
5. Socio-economic Status of Students
6. Gender of the Principal
7. Administrative Experience of the Principal

#### Effective School Research

Beginning with Weber's (1971) study of school effectiveness, factors common to school effectiveness have been identified and analyzed. The purpose of Weber's study was to identify the characteristics of four inner-city elementary schools that were successful in teaching reading. The elementary schools were selected for the study because the third grade median reading achievement scores in each of the four schools was equal to or exceeded the national norm and the percentage of nonreaders in the schools was very low. Weber identified at least four variables of school

effectiveness that subsequent research has confirmed: strong leadership (by principals in three schools and a superintendent in the fourth school), high expectations for students, atmosphere (orderly climate, sense of purpose, relative quiet, pleasure in learning), emphasis on reading instruction, and careful and frequent evaluation of student progress. Interestingly, the success experienced in each of the four schools was achieved over a period of years. The conclusion of the study was that, within limits, characteristics of school effectiveness could be generalized.

In another study on school effectiveness, Brookover and Lezotte (1979), studied eight Michigan elementary schools to identify differences between improving and declining schools. Improving schools demonstrated an increase in the percentage of students attaining 75% or more of tested objectives and a decrease in the percentage of students attaining less than 25%, while declining schools showed a decrease in the percentage of students attaining 75% or more of the tested objectives and an increase in the percentage of students attaining less than 25%. The purpose of the study was to determine relationships between school social structure, school climate, programs and personnel, and their effect on patterns of improvement or decline in student reading achievement from 1974-1976.



The characteristics of improving schools were different from declining schools in several ways:

1. The staff emphasized the accomplishment of basic reading and math objectives.
2. Teachers and the principal tended to believe that all students could master basic objectives.
3. The staff projected higher expectations of student accomplishments.
4. Teachers and the principal assumed greater responsibility in teaching basic reading and math skills.
5. The staff spent more time in direct reading instruction.
6. The principal was more likely to be an instructional leader, assertive in the role of instructional leader, a disciplinarian, and more likely to assume responsibility for the evaluation of the achievement of objectives.
7. The staff was more accepting of accountability; they believed that standardized test scores were one indication of their effectiveness.

The New York State Performance Review (1974) study provided results similar to Weber's findings. In a case study, two New York elementary schools serving low socio-economic students were examined. The two schools were matched according to median family income, percentage of families receiving welfare, percentage of students eligible for free lunches, student mobility, and student ethnic background. One school had consistently high reading

scores, the other consistently low reading scores. The study suggested that differences in student achievement were due to factors significantly related to leadership behavior. Factors related to leadership behavior in the higher achieving school were not evident in the lower achieving school. Factors related to leadership behavior and student achievement included the following:

1. There was a positive climate between teachers and the principal. Teachers were involved in decision-making in the school. There was an atmosphere of good relations and cooperation between the staff and principal.
2. The principal was highly involved with instruction and curriculum. The principal gave instructional support and assistance to teachers. Informal classroom observations were made by the principal in addition to formal observations.
3. The principal implemented a comprehensive school-wide plan for reading instruction. Coordination and planning of the reading program between staff members was evident.
4. Attention was given to creating a positive school climate. The building was well-maintained. Student attendance was high. Teachers considered the school "a pleasant place in which to work."
5. Communication between the community and the school was evident. The principal was achievement oriented. There was

a collaborative atmosphere between students, parents, and the staff.

In 1979, the New York City Board of Education conducted a school improvement study. The study was conducted to help identify differences in leadership characteristics between principals. Improvement was determined by rankings over a four year period on a reading achievement test. Schools that showed significant improvement were labeled "improving" and schools that showed no substantial improvement were labeled "maintaining/ declining." Four improving and five maintaining/declining schools were matched according to school size and student socio-economic characteristics. The researcher found strong administrative leadership, school climate conducive to learning, emphasis on teaching basic skills, high teacher expectations for students, and on-going evaluation of student progress were more characteristic of improving schools than of maintaining/declining schools. Teachers in maintaining/declining schools indicated that there was a lack of instructional supervision by administrators. They were dissatisfied with the instructional goals of the school. Teachers identified inadequate involvement in curriculum, inservice training, and coordination of instruction as problem areas. They did not think there was effective communication with principals or an orderly school atmosphere.

In a research synthesis on effective school leadership, Sweeney (1982) developed four criteria for selecting valid research studies on school leadership: (1) evidence that the study was internally valid, that is, whether the researcher(s) used appropriate measuring instruments and statistical analysis, (2) evidence of control for pupil characteristics, (3) classification as effective or exemplary based upon operational definitions of achievement, and (4) significant positive relationships between school achievement and instructional leadership behavior were reported. In his synthesis, he included studies conducted by Weber (1971), Brookover and Lezotte (1979), New York State Performance Review (1974), and the New York City School Improvement Project (1979) among those that provided some of the most valid and extensive research on effective instructional leadership. Of the four studies, Brookover and Lezotte (1979) and the New York City School Improvement Project (1979) included the coordination of instructional programs as a leadership behavior positively associated with school effectiveness. Three of the four studies identified the frequent evaluation of pupil progress as a leadership behavior positively associated with school effectiveness. All four studies identified an emphasis on achievement, an orderly atmosphere, and setting instructional strategies as leadership behaviors positively associated with school effectiveness.

A three-year study, part of the Effective Schools Project of the Seattle School District, was conducted by Andrews and Soder (1986) to explore the relationship between teacher perceptions of the principal as an instructional leader and the gain scores of students in 33 elementary schools. Special attention was given to four facets of principal behavior: (1) mobilizing resources, (2) communicating, (3) serving as an instructional resource, and (4) being a visible presence. The hypotheses tested in the study were that students who attended schools that were administered by principals who were strong instructional leaders would have: (1) significantly greater increases in scores for reading and math than students who attended schools where principals were not strong instructional leaders, and (2) the leadership of the principal would be significantly related to other school variables.

The 33 schools were divided into three groups of schools based on the principal leadership variable score. The three groups were based on the rating of principals by teachers in the school. The groups were: Strong Leader, Average Leader, and Weak Leader. Schools in each group were comparable in size, percentage of ethnic minority students, and percentage of children participating in the school free-lunch program.

The findings of this study suggested that the principal's role was crucial in the reading and mathematics achievement of low-achieving students. In reporting the

results of the study, Andrews and Soder (1987) stated "that teacher perceptions of the principal as an instructional leader were crucial to the reading and mathematics achievement of students, particularly among low-achieving students" (p. 11). In addition to the strong leadership variable, eight additional variables were measured with the staff questionnaire. The variables most highly related to strong leadership were those identified by previous research - namely, positive learning climate, frequent monitoring of student progress, and high expectations. Interestingly, the leadership of the principal was not found to be significantly related to curriculum continuity and staff dedication.

This was an important study because the research addressed some of the limitations that were present in case studies and outlier studies. The sample of schools used in the study consisted of 33 elementary schools where sufficient achievement data were obtained to allow for reliable and valid conclusions. This sample is significantly larger than those found in case studies and the outlier studies. In addition, achievement data was collected over a period of three years. To be included in the study, students had to be enrolled in the same school over a two-year test time.

### Synthesis of Existing Studies

There are four types of studies that have been conducted on effective schools research: outlier studies, case studies, program evaluation studies, and "other" studies. A summation of past research by Purkey and Smith (1982, 1983) included the following:

1. Outlier Studies. These studies identified schools as highly effective or ineffective based upon a comparison between the actual and expected achievement of their students. Differences in achievement levels of students in outlier schools were statistically significant from students in other schools with similar socio-economic backgrounds and prior achievement levels. Most of these studies utilized regression analysis of school mean achievement scores, controlling student body socioeconomic factors. Although the studies identified some common variables, Purkey and Smith (1982) indicated that "no variable in particular was crucial." Of seven studies conducted, four studies identified better control and discipline and high staff expectations as variables common to school effectiveness. Purkey and Smith (1983) also indicated that instructional leadership by the principal or other staff member was found in three studies. The studies did suffer weaknesses. The studies included small sample sizes ranging from two to twelve schools. According to Purkey and Smith (1982),

"the small sample sizes suggest that the characteristics that appear to discriminate between high and low outliers are chance events" (p. 65). The studies also concentrated on urban elementary schools with primarily minority and low-income students.

2. Case Studies. Six of the studies examined urban elementary schools. Purkey and Smith (1982) reported that, as a group, these six studies examined 43 schools - an average of around seven schools per study. Small sample size was a weakness shared with the outlier group. In spite of this, there were common characteristics of effective schools identified in the case studies. Purkey and Smith (1982) found that five variables were identified to most, but not all of the case studies: strong leadership by the principal or other staff member, high expectations by the staff for student achievement, a clear set of goals for the school, an effective staff training program, and a system for monitoring student progress. An emphasis on order and discipline was found in two of the case studies.

3. Program Evaluation. Purkey and Smith reported that, "by and large, these studies were methodologically stronger than the preceding two types of research" (p. 66). However, their conclusions are similar to the outlier and case studies findings. Purkey and Smith (1982) stated that most schools with effective programs "were characterized by high



staff expectations and morale, a considerable degree of staff control over instructional training decisions in the school, clear leadership from the principal or other instructional figure, clear goals for the school, and a sense of order in the school" (p. 66).

4. Other Studies. A study by Coleman and others (1981) compared public and private secondary schools. Purkey and Smith (1982) questioned whether Coleman et. al. (1981) controlled well enough for student body composition, student enrollment, and other factors. However, the corresponding characteristics that explained the higher academic achievement of private schools were consistent with characteristics of effective public schools identified by researchers. School governance was found to be critically important in creating safe schools. According to Purkey and Smith (1983), principals who were "firm disciplinarians, strong behavioral role models (for students and teachers alike), and educational leaders were crucial in making the school safe" (p. 438). It is evident that the behavior of the principal is an important factor in determining school effectiveness.

#### Limitations of the Research

Although the role of the principal as an instructional leader appears to be a component of school effectiveness, the research does contain flaws and school effectiveness literature has received criticism in several areas.

In their review, Methodological Considerations in Studies of Effective Principals, Rowan, Dwyer, and Bossert (1982) identified several measurement and research design problems found in studies of principal instructional leadership:

1. Measures of Leadership. According to Erickson (cited in Rowan, Dwyer, & Bossert, 1982), "many measures used in studies of leadership did not ask for data on behavior, but rather summary reports about respondents' evaluations of behavior" (p. 7). These reports failed to describe the actual activities principals must accomplish in order to increase school effectiveness. Rowan, Dwyer, and Bossert (1982) indicated that what is needed are "descriptive reports of concrete behaviors used by principals to help manage instruction" (p. 9).

2. Measures of School Effectiveness. Nearly every study used student achievement as the measure of effectiveness. Rowan, Dwyer, and Bossert (1982) suggested that by focusing on academic achievement exclusively, "the literature ignored the relationship between academic outcomes and other dimensions of schooling such as citizenship, self-esteem, and self-discipline" (p. 11). More attention needs to be focused on the relationship between various criteria, including non-academic outcomes, as measures of school effectiveness.

3. Research Design. Many of the studies on effective principals ignored the contextual elements that influence the relationship between instructional leadership and school effectiveness. Rowan, Dwyer, and Bossert (1982) observed that current research discounts the contingency theories of organizational effectiveness and "presents a view of leadership effects that is extremely optimistic" (p. 4). They concluded that research on principals should focus more on "connecting school context and contingency theories of leadership to prevailing research designs" (p. 17).

Another factor that has been identified as limiting effective school research is school size. Rowan, Dwyer, and Bossert (1982) recognized that some measures of effectiveness used procedures that had a tendency to be correlated with school size. The authors stated that there was a chance "that studies of effective schools identified a model of administration in smaller organizations (high staff participation and personal contact between teachers and principal) as effective only because they were more likely to be scored as outliers" (p. 13).

Many of the studies on school effectiveness have been conducted using correlation and case study designs with limited samples - ones that focused on elementary schools that served primarily low-income, minority students in urban areas (Andrews & Soder, 1987; Hallinger & Murphy, 1985;

Purkey & Smith, 1982; Purkey & Smith, 1983). In addition, the criteria for effectiveness was also very limited. Student achievement in reading and math using standardized norm-referenced tests was used almost exclusively. Schools were selected as effective based on a single outcome measure. Other outcome measures such as attendance rates, retention rates, and parent involvement were not included in the studies.

Observation-based assessments were never incorporated into the studies. This type of assessment is viewed by some authors (Stiggins, 1988; Wiggins, 1989) as an important alternative to more traditional standardized, norm-referenced tests. Observation-based assessments may include student portfolios, performances, and various examples of students' work. As formal assessments, record keeping is important, and may be in the form of anecdotal comments, checklists, or videotaping. Student competence is based on well-defined criteria and is assessed numerous times throughout the school year.

In general, longitudinal studies were not included as part of the established research. It has not been demonstrated that reading scores of a third grade class in an effective school will look similar when the class is in sixth grade or eighth grade (Purkey & Smith, 1982). Some of the variables or outcome measures were not well

defined operationally. A practitioner or another researcher may not understand what "clear academic goals, high expectations, instructional leadership, or orderly environment" actually means (Cruickshank, 1990).

### Characteristics of Effective Schools

Characteristics of effective elementary schools were identified by the Network for Effective Schools (1987), National Association of Elementary School Principals (1984), and the Educational Research Service (1983). The findings of these reports were based upon research and practice of school effectiveness for the past several years.

Characteristics of effective schools included leadership, curriculum and instruction, evaluation and assessment, and school climate. The studies described the characteristics of effective schools as follows:

1. Leadership. Schools had leadership by the superintendent, principal, and other personnel with emphasis on the mission statement, based upon instructional goals and planning. There was a commitment to excellence by the school board, staff, and community. The principal inspired the staff to accomplish the school's mission. The principal conveyed high expectations for students, staff, and self. The principal kept the educational program emphasis on academic achievement and student learning. In effective schools, leadership provided the school climate that allowed essential characteristics of school effectiveness and

successful learning to take place (McCurtain, 1988).

2. Curriculum and Instruction. There was a clear statement of instructional goals. The curriculum defined what teachers were to teach and what students were to learn. There was articulation of objectives across grade levels. Curriculum and instruction emphasized student mastery of basic skills in reading, writing, math, problem-solving, and higher-level thinking skills. There was alignment between what was taught and the assessment measures used to evaluate the instructional program. There was linkage between assessment and diagnosis with instruction based upon student level of development. The effective instructional program was demonstrated through teacher planning, classroom management, classroom materials and activities linked to specific objectives, various teaching styles, and instruction of higher-level thinking skills.

3. Evaluation and Assessment. The instructional program focused on the achievement of specific objectives. Staff members knew the goals of the school and understood the standards of performance expected. The staff worked together to insure continuity of instruction across grades. The school staff focused on evaluating student outcomes (student performance, attendance, etc.). Test results were analyzed by the principal and staff and communicated to parents. The school developed a system for carefully and continuously monitoring student progress. Teachers provided

feedback to students and parents regarding progress toward specific objectives. There were systematic plans to upgrade student proficiency in basic skills. The school made use of a variety of assessment measures, including standardized achievement tests. Evaluation and assessment measures corresponded with the objectives of the instructional program.

4. School Climate. The school staff believed that all children could learn. Students and staff were expected to be successful. Students and staff were recognized for their accomplishments. The school simultaneously addressed the need for excellence and equity. The school environment was orderly and positive. The school implemented discipline policies that were clear, firm, and consistently enforced. School policies minimized interruptions which might inhibit learning. Relations among staff were collaborative. Parents felt welcome in the school and worked cooperatively to help students learn. The school promoted school/community interaction. School pride was evident among students, staff, and community.

#### Instructional Leadership

Strong instructional leadership by the building principal or another staff member appears to be a consistent indicator of school effectiveness. However, the role of instructional leader is more than conducting teacher evaluations, reviewing test scores, and selecting textbooks.

Principals who demonstrate competencies necessary to be an instructional leader engage in specific behaviors that set them apart from other principals.

Principals who are instructional leaders clearly define the mission of the school and help determine, along with the school staff, the goals that support the mission. They take every opportunity to communicate the instructional mission and goals of the school to the staff, parents, and community (Purkey & Smith, 1982; NAESP, 1984; Network for Effective Schools, 1987). The mission of the school and the goals provide the framework for selecting programs, personnel, resources, activities, and evaluation criteria for determining school effectiveness (Hallinger & Murphy, 1986). The goals are consistent with the mission of the school, reflect staff consensus, and focus on important instructional objectives.

Principals who are instructional leaders manage the instructional program through supervision and evaluation of the instructional program, coordination of the curriculum, and monitoring student progress. According to Hallinger and Murphy (1985), "the central task of the principal as instructional leader is to ensure that school goals are translated into classroom practice" (p. 222). As instructional leaders, principals work with the teaching staff to coordinate the curriculum. This is accomplished by aligning the curriculum across grade levels and classrooms



to ensure the articulation of important instructional objectives. Standardized achievement tests, along with other evaluation criteria, are used to help determine both program and student weaknesses. Test results are then used to make changes in the instructional program.

Instructional leaders promote a positive school climate for teaching and learning. They maintain an organizational structure conducive to learning and encourage and reinforce the attitudes, behaviors, and norms necessary to support an effective instructional program. To the effective instructional leader, the highest priority is managing the instructional program. Effective instructional leaders protect instructional time. Principals who successfully implement policies that limit classroom interruptions can increase allocated learning time, and potentially, student achievement (Hallinger & Murphy, 1985). Principals who operate as instructional leaders encourage and promote staff development opportunities that meet the needs of teachers and are closely linked to the instructional goals of school. Staff training is emphasized as a method to improve classroom performance. The effectiveness of staff development activities is based upon desirable changes observed in the classroom (NAESP, 1984). Effective instructional leaders maintain high visibility throughout the school setting. They communicate routinely with teachers and students to gather information to assess the

changing needs of their staff and school. They encourage collaborative planning and a school atmosphere that promotes unity among the staff (Purkey & Smith, 1983).

Principals who are instructional leaders maintain their presence throughout the building and provide for positive attention to staff and student accomplishments (Smith & Andrews, 1989). In addition, they have high expectations for the level of performance for teachers and students. They communicate the expectation that all students can learn. They promote policies and practices that reinforce this expectation by protecting instructional time, maintaining an instructional focus, emphasizing mastery of basic instructional objectives and high academic achievement as the primary mission of the school.

#### Principal Behavior

One of the most consistent characteristics of effective schools is strong administrative leadership (Edmonds, 1979). A summary of research on effective schools presented in Standards for Quality Elementary Schools: Kindergarten through Eighth Grade (NAESP, 1984) states that the instructional leadership of the principal is "basic to the development of high expectations for student achievement and staff effectiveness, to building of consensus concerning the school mission, and to stimulating superior work by staff and superior attainment by students" (p. 15). In a report

of the findings of a major school reform study, Expecting the Best, Effective Public Education for All Students (Network for Effective Schools, 1987) found that effective schools had strong instructional leaders who "established a collegial working relationship with the faculty and communicated the mission of the school at every opportunity" (p. 9).

There is research evidence that the principal can exert a powerful influence in creating a school climate that is conducive to learning (Educational Research Service, 1983). In the Brookover and Lezotte (1979) study, improving schools had principals who were more likely to be instructional leaders, assertive in their role as instructional leaders, disciplinarians, and assume responsibility for evaluation of basic instructional objectives. In declining schools, principals were more permissive, placed more emphasis on informal relationships with teachers, were more concerned about public relations, and placed less emphasis on the evaluation of basic skills.

Research on school effectiveness has concluded that the principal can have a considerable effect on the quality of the school's instructional program. However, according to Hallinger and Murphy (1985), "few studies have investigated what principals do to manage curriculum and instruction. Even less research has examined the organizational and

personal factors that influence principal instructional leadership" (p. 217).

The Principal Instructional Management Scale developed by Hallinger and Murphy (1985), measures the frequency with which principals engage in specific instructional management practices. The PIMRS divides instructional management into three broad dimensions: defining the school mission, managing curriculum and instruction, and promoting school climate. Within each dimension, job functions of the principal's behavior are identified. Job functions are identified as subscales within each dimension. Each subscale includes items that are descriptive of critical job-related behaviors. The items are statements of job-related behaviors on which respondents can base their appraisal of an individual's performance.

The first dimension is defining the school mission. The two subscales within this category are Framing School Goals and Communicating School Goals. The second dimension is managing curriculum and instruction. The three subscales within this category are Supervising and Evaluating Instruction, Coordinating the Curriculum, and Monitoring Student Progress. The last dimension is promoting a positive school climate. There are five subscales within this category: Protecting Instructional Time; Maintaining High Visibility; Providing Incentives for Teachers;

Promoting Professional Development; and Providing Incentives for Learning. Indicators of principal behavior that may be present in relation to school effectiveness are: defining the school mission, managing the instructional program, and promoting school climate.

#### Teacher Perceptions of Principals

There have been several major studies in which the perceptions of teachers has been utilized as an important source of data. In Administrative Performance and Personality, Hemphill, Griffiths, and Frederiksen (1962) studied principals in a simulated elementary school environment. The study included the infamous in-basket tests. Evaluations of the principals' performance in their home districts were also included in the study. The evaluations were based on superior and teacher perceptions of principals' performance on the job. Although both teachers and administrators observed the same principal over long periods of time, they showed only slight agreement in their evaluations. The perception of how effectively a principal performed the job depended, in large degree, on the person being questioned (Hemphill, Griffiths, & Frederiksen, 1962). The study revealed that the differences in findings were a reflection of divergent values, points of view, and perceptions between groups of persons "who formed judgements about performance." Hemphill, Griffiths and Frederiksen (1962) concluded that "not every real-life

situation will provide opportunities for the expression of any or all personality tendencies" and that "inferences concerning an individual's performance, is a function of both the situation and person" (p. 357).

In the study Staff Leadership in Public Schools: A Sociological Inquiry (Gross & Herriott, 1965), the leadership characteristics of elementary principals were examined. A source of data was a teacher questionnaire mailed to a random sample of ten teachers in 175 elementary schools participating in the study. Elementary schools were selected for the study because the researchers reasoned that elementary principals interacted more directly with the teachers than principals in junior and senior highs. According to Gross and Herriott (1965), in a secondary setting, assistant principals, department heads, counselors, and other personnel would be more likely to affect the Executive Professional Leadership (EPL) of the principal than in an elementary setting.

Because the definition of EPL referred to the principal's attempts to influence teachers, Gross and Herriott (1965) used a Teacher Questionnaire. The questionnaire included 18 statements about principal behavior that represented the degree to which principals conformed to an EPL definition of their role. Teachers were asked to report how frequently their principal engaged in the 18 categories of behavior. Teachers were "to serve as

observers of the principal's behavior" (p. 19). In determining the method of administration for the Principal Instructional Management Rating Scale, Hallinger and Murphy (1985) also included teachers' responses in the data collected. The authors concluded that, within limits, the instrument provided reliable and valid data on principal behavior.

An aspect of the principal evaluation procedure is the "client-centered" assessment. Essentially, a client-centered assessment is a system in which personnel served by the principal (staff, students, parents, community) contribute data to the overall evaluation. According to a 1986 (Tucker) study conducted in DeKalb, Georgia, when principals were compared using multiple assessment sources, significant correlations were found between client-centered principals receiving the highest scores and sixth grade achievement test scores in reading and math, student absences (less in high-scoring schools), employee absences (less in high-scoring schools), student misbehavior (less in high-scoring schools), and student tardiness (less in high-scoring schools). However, socio-economic status was not included as a factor and exclusion of SES could have affected the findings.

Teacher perception rating instruments measuring the frequency of specific principal behavior have provided a valuable source of data. Several studies have concluded

that teacher questionnaires produce valid, reliable data on principal behavior (Andrews & Soder, 1987; Gross & Herriott, 1965; Hallinger & Murphy, 1985)

#### Organization Size

In The Structure of Organizations, Blau and Schoenherr (1971) recognized "the implicit assumption that organizational size is an antecedent that affects other characteristics of organizations" (p. 9). The complexity of the formal structure of an organization can be identified by the number of different positions of various sorts to which employees are assigned. According to Blau and Schoenherr (1971), "structural complexity is assumed to have its source in differentiation, and the operational definition of differentiation in any one dimension is the number of different subunits or positions observed along this dimension" (p. 56).

Blau and Schoenherr (1971) examined the characteristics of fifty-three employment security agencies and concluded that organizational size had a direct influence, when other conditions were controlled, on fifteen of the twenty-five variables included in the study. Blau and Schoenherr (1971) reported that, in most cases, "the influence of size is pronounced." The study determined that office size exerted the dominant influence on the span of control of first-line supervisors. The complex structure in large organizations creates special problems of coordination and communication



that require the attention of administrative personnel and leaves them less time for the supervision of subordinates.

Blau and Schoenherr (1971) affirmed that the direct influence of size on the span of control of supervisors has been interpreted as a structural effect on the organization, "revealing the external influence of the social environment on human behavior" (p. 223). The authors assumed that "fundamental structural conditions exert constraints on the members of organizations that make their administrative decisions virtually independent of their psychological dispositions" (p. 300). They concluded that "formal structures consequently exhibit regularities that can be studied in their own right without investigating the motives of the individuals in organizations" (p. 301). The size of organizations has a profound influence on their structure and organizational structure exerts constraints that limit the alternatives of individuals.

Blau and Schoenherr (1971) provided the theoretical assumptions about organizations and the effect of size on the administrative functions:

1. Expanding size is a social force that affects differentiation. Differentiation results in increased structural complexity.
2. Structural complexity increases demands on supervisors and intensifies problems of communication and coordination.

3. Supervisory span of control expands with increasing organizational size.

According to Slater (1989), "size has only been important because of its relationship with social structure and culture" (p. 216). A consequence of increasing organizational size is the number and kinds of interactions and relationships between and among its members. Terrien and Mills (1955) indicated that "an increase in the number of members in a group brings about an almost geometrical increase in the potential relationships" (p. 11). Simmel (1902) held to the belief that "the sociological structure of a group is essentially modified by the number of individuals that are united into it" (p. 2). Simmel (1902) went on to say that size affects the nature of personal interaction between group members, "the greater the number of persons who come together, the smaller will be the probability that they can coincide in those more worthy and intimate sides of their nature..." (p. 29). He also identified the effect of size on group functions:

Small and centripetally organized groups usually call out and employ to their full extent the energies available within them; in greater groups, on the other hand, much more energy, not merely absolutely, but also relatively, remains in a latent condition (p. 7).

Blau (1972) defined an organization as "a system for arranging the work of many individuals in a common enterprise" (p. 14). An organization depends on the social

integration of its members. Blau (1972) recognized that "social integration requires subunits small enough for regular personal contacts among members" (p. 13).

Conditions that lead to impersonal methods of social control are generally associated with the expanding size of organizations (Blau, 1968). Peters and Waterman (1982) described the relationship between efficiency and the size of the company facility. The authors discovered that the better companies had determined that small plants, not big plants, were the most efficient. Repeatedly, workers in smaller facilities turned out to be the most productive and efficient. They outproduced workers in larger facilities time and again. Many of the plants employed fewer than 600 people, a size at which management could maintain personal contact with individual employees.

The common measure of organizational size found in literature is the number of employees. Studies of human service organizations use measures such as the number of clients served, while educational organizations often use the number of students enrolled to indicate organizational size (Kimberly, 1976).

#### School Size

In A Place Called School, Goodlad (1984) identified several recurring themes that characterized effective schools. One theme was the satisfaction of students, staff, and parents as a significant indicator of school quality,

including student achievement. In a comparison of satisfaction profiles, schools in the top half tended to share several demographic characteristics. According to Goodlad (1984), schools that were viewed as the most satisfying were "small, rural or suburban, predominately white in population, and supported by parents who are above average in education and income" (p. 251). Goodlad (1984) went on to say that the characteristic "large" appeared to be "consistently descriptive of the less satisfying schools and consistently not descriptive of the more satisfying schools" (p. 251).

The author stated that "it is not impossible to have a good large school; it is simply more difficult" (p. 309). He went so far as to suggest that school size was a characteristic that could be changed. He set the top limit of school size at 800 students for the secondary and 400 for elementary. However, his preference was for 600 and 300 students, respectively. Goodlad (1984) went on to state that "we need more studies into an array of correlates of school size" (p. 338).

In a study of the differences in school size, Chambers (1981) concluded that there were some economies to be gained from increasing the size of a school. The estimate of the minimum efficiency size for elementary schools was 300 students. However, increases beyond a certain level

resulted in a reduction in the degree of interaction, communication, and coordination of activities between children, teachers, and administrators.

Campbell, Cotterell, Robinson, and Sadler (1981) studied the effects of school size on aspects of the individual student personality. The authors found that although school size did not emerge as a major influence in student personalities, it was not an insignificant factor. They recommended that elementary schools have a minimum enrollment of 300. The study also concluded that it was more difficult to maintain high levels of participation and provide a "warm, challenging learning environment" in elementary schools with enrollments above 700 students.

Some larger high schools have divided themselves into smaller "houses" within a building. Each house represents a school within a school. Within this setting, students have an opportunity for more one-on-one contact and personal instruction. In many instances, the houses are comprised of 400-600 students. This arrangement is an effort to improve the climate, discipline, and instructional effectiveness of the high school (Lezotte, Hathaway, Miller, Passalacqua, & Brookover, 1980).

Sally, McPherson, and Baehr (1979) provided an occupational analysis of principals. Working in collaboration with the Industrial Relations Center at the

University of Chicago, the Consortium for Educational Leadership planned and completed the "National Occupational Analysis of the School Principalship." The primary effort of the study was directed toward the development of a standardized and quantified instrument for describing the fundamental dimensions of the principal's job and determining their relative importance for job performance. The Job Functions Inventory for School Principals developed for the study was based on a sizable and diverse sample drawn from a number of geographic locations. The study included the administration of the instrument to over 700 principals nationwide. One premise of the research was that the definition of the job (the principal's description of the important functions in his/her work) would deviate with changing conditions of operation (environmental constraints).

Two major findings of the research included the following:

1. Variables relating to type and size of school accounted for the greatest number of differences in the way principals described their jobs, although socioeconomic status and ethnic composition of the student body and teaching staff had a significant impact.
2. Personal characteristics of the principal produced the fewest differences. However, some differentiations on the

basis of race and sex were noteworthy. The study concluded that the most extensive influences on the principal's job were exerted by the size of the school, as represented by either the number of students or teachers. The size of the school greatly influenced the principal's definition of his or her work. The authors argued that the individual personality of the principal may be an important factor in the school setting only after organizational constraints are understood:

Our data analysis suggests that, to a certain extent, principals are captives of their environments. This is not to say that some individual principals will not overcome organizational obstacles in performing their work and changing their particular school environment (p. 35).

#### Socio-economic Status of Students

Although research suggests that school size may influence instructional management behavior, there are other factors that may influence the behavior of the principal as well. The socio-economic status of students attending the school has been identified as a significant factor in the way in which principals described their work (Salley, McPherson, & Baehr, 1979). Hallinger and Murphy (1986, 1987b) found that the socio-economic level of students attending the school was a factor in the instructional behavior of principals.

Lezotte et al. (1980) indicated that there is considerable evidence that the expectations held for

students are related to student achievement and "that schools with predominately low-achieving students are characterized by low expectations and institutional practices that define low levels of achievement as appropriate and proper for their students" (p. 26). The principal alone cannot ensure an effective learning climate; however, the principal can help improve or impede progress toward that end (Lezotte et al, 1980; Sarason, 1971).

In an analysis of differences between effective high and low SES schools, Hallinger and Murphy (1986, 1987b) found that student background characteristics influenced the instructional leadership of principals. The social context of the school appeared to have an impact on the instructional leadership style of the principal. Principals in low SES schools assumed a more directive role in curriculum and instructional programs (Hallinger & Murphy, 1986, 1987b). They were more likely to be intensely focused on high expectations for the staff and students. They were identified as the "key actors in developing and sustaining high expectations on the part of the staff" (p. 196). Principals in high SES schools demonstrated less direct control over instruction and granted teachers more autonomy as long as achievement "did not fall below expected results" (Hallinger & Murphy, 1986). Teachers also identified these principals as instructional leaders but generally did not



indicate that they were the key to the school's success. Hallinger and Murphy (1987b) reported that teachers and principals in high SES schools identified "parents as the fundamental source of the school's high expectations" (p. 196). Whereas the expectations in high SES schools appeared to originate from the community, low SES schools had to create and sustain the expectations from within the school (Hallinger & Murphy, 1986).

The findings support researchers who contend that leadership is related to social context and is not the same in every situation (Hallinger & Murphy, 1987b). In Methodological Considerations of Effective Principals, Rowan, Dwyer, and Bossert (1982) were critical of studies that did not include contextual factors that may affect leadership and school effectiveness. The authors suggested that current research should consider contingency theories of organizational effectiveness. The findings are also consistent with researchers who demonstrate that behavior is both a function of individual and organizational characteristics (Blau & Schoenherr, 1971; Getzels, 1958; Hemphill, Griffiths, & Frederiksen, 1962). Social structure and school climate have a pronounced influence on the behavior and performance of individuals (Gross & Herriott, 1965; Sarason, 1971; Slater, 1989).

### Gender of the Principal

Past research indicates that gender may affect the leadership style of the principal. In particular, leadership behavior associated with instructional management may be affected by the gender of the principal. In their study of gender and its impact on administrative performance, Hemphill, Griffiths, and Frederiksen (1962) found that in learning situations, women placed greater emphasis than men on teaching objectives, pupil involvement, and assessment of teaching. Superiors' ratings on knowledge of teaching methods and techniques tended to be higher for women. On the basis of in-basket performance, "women involved teachers, superiors, and outsiders in their work, while men had a tendency to make final decisions and take action without involving others" (p. 333).

In The Sex Factor and the Management of Schools, Gross and Trask (1976) examined the sex of administrators to determine if gender influenced their performance and operation of their organizations. The findings of the study revealed that women rated their own performance higher and derived more satisfaction from supervising instruction than did men. Men received more satisfaction from routine administrative tasks than women. However, there were no sex differences for the whole sample in the degree of importance men and women placed on instruction. Interestingly, the professional performance of teachers and student learning

were higher in schools administered by women. In relation to socio-economic status of the students, male administrators in low SES schools exhibited less concern for individual differences among children and for their social and emotional development than female administrators. The researchers concluded that many of the differences were related, in part, to the type and amount of teaching experience that men and women had prior to becoming principals. Women principals had considerably more teaching experience than men. Women taught an average of three times as long at the elementary school level as men. One third of the males had never taught at the elementary level while only 3 percent of the females had never taught at the elementary level. The average number of years of elementary teaching experience was 14.7 for women and only 4.6 for men; the difference of 10.1 years was statistically significant.

In a ten year study of the K-8 principalship, Doud (1989) found that the mean age for entering the position was thirty-three for men and thirty-nine for women. Nearly half of the women received their first position after the age of forty, while just 14 percent of men entered the position at a similar age. The author also found that women were more than twice as likely as men to be principals in schools of less than 200 students while men were more than twice as likely to be principals in schools with 500 to 699 students.

Coursen, Mazzarella, Jeffress, & Hadderman (1989) reported that women currently comprise approximately 24 percent of the principals in the United States. They are more likely to be elementary school principals than secondary. The selection of principals based on gender appears to have no basis in fact. Salley, McPherson, and Baehr (1979) concluded that viewing gender as "an essential attribute for saving a school in trouble appears to be unsupportable" (p. 36).

#### Administrative Experience of the Principal

The value of administrative experience in relation to performance as a principal is not as evident as one might assume. In their research of administrative performance and personality, Hemphill, Griffiths, and Frederiksen (1962) found little relationship between administrative experience and "any measure of performance in the simulated school situation" (p. 352). Results in the Salley, McPherson, and Baehr (1979) study were equally inconclusive. When principals were asked to identify the important job functions of their work, experience was "not a differentiating factor in the principal's description of his or her work" (p. 36). Both experienced and inexperienced principals described their work in a similar fashion. This led the authors to conclude that more experienced principals were not performing "any crucial or different functions" than inexperienced principals.

When Gross and Herriott (1965) studied Executive Professional Leadership (EPL) and elementary school principals, they found that experienced principals did not exhibit greater EPL than their inexperienced counterparts. There was no relationship between previous administrative experience and EPL. The authors also discovered that the type or length or previous teaching experience did not discriminate between principals and EPL.

In a national survey of 2,414 principals, respondents were asked to rate the value of various kinds of preparation and experiences that contributed to success as an elementary principal (Doud, 1989). More than 96 percent of the principals indicated that on-the-job experience as a principal had "much value" to their success and more than 83 percent indicated that teaching experience had "much value" to their success. When respondents were asked which area of their own professional development needs were greatest, "improving staff performance" was listed as the number one priority. Principals also identified activities associated with instructional leadership as important areas. Approximately one respondent in four identified planning and implementing curriculum, supervising the instructional program, staff evaluation, effective leadership, and improving student achievement as priority areas. In an earlier study, The Elementary School Principalship in 1978: A Research Study, Pharis and Zakariya (1979) also

surveyed principals to help determine the value of various types of career preparation and experiences. The authors reported that more than 84 percent of the principals placed "much value" on experience as a teacher and principal as the type of experience that was most instrumental to success in the principalship.

A study conducted by Rousseau (1971) showed similar results. Principals who demonstrated high levels of performance appeared to "favor those who had more principalship experience" and that "moderately experienced elementary principals were more effective than newly appointed principals" (p. 22). The population of the study were elementary school principals who demonstrated high administrative performance as perceived by their teachers. The four scales of administrative performance included in the teacher questionnaire were administrative decision making, communication, general administrative behavior, and instructional leadership. Principals having a mean response in the highest 40 percent of each scale were considered to be in the "high success" classification.

#### Contribution to the Knowledge Base

This study will examine the relationships between elementary principal behavior and school size, socio-economic status of students, gender of the principal, and administrative experience. The study will analyze the perceptions of elementary school instructional staff and

assess the degree to which these factors are associated with the instructional management behavior of the elementary principal as measured by the PIMRS.

As noted earlier, researchers have suggested that future research should focus more on school context and its relationship to principal leadership and instructional management. The results of this study may give school policymakers and researchers greater insight into organizational and social factors of schools, characteristics of principals, and the extent to which they are related to instructional management behavior.

## CHAPTER 3

### Methodology

#### Description of the Population

For this study, the population was defined as elementary schools in Iowa with an enrollment of 200 or more students. Schools with fewer than 200 students were more likely to have principals with other duties (teacher, counselor, etc.). In addition, principals with enrollments of less than 200 students often have responsibilities at more than one building. Either of these arrangements could restrict the amount of time the principal has for instructional duties. The study also limited the sample to elementary schools in districts without direct central office support from subject area curriculum coordinators with district-wide responsibilities. They assist with curriculum coordination, monitor student progress, and engage in other instructional management activities in schools. In these cases, the principal's role as the building level instructional leader may be diminished.

Schools were listed numerically and selected at random using a table of random numbers. The sample included fifteen schools in each school size response category. A total of forty-five ( $N=45$ ) schools were selected to participate in the study with ten teachers responding to the survey from each school. Teachers in each school were chosen randomly by identifying the first, third, fifth,



seventh, ninth, eleventh, thirteenth, fifteenth, seventeenth, and nineteenth teacher from an alphabetical listing of the faculty. A total of 450 teachers were invited to participate in the study.

The sample included approximately the same proportion of men and women as represented in the general population of elementary school principals in Iowa. Of the 307 elementary schools in the sample, 72 were headed by female principals. This meant women represented approximately 23 percent of the total principalships in the sample. This percentage was very close to the national average of 24 percent (Coursen, Mazzaella, Jeffress, & Hadderman, 1989).

#### Instrumentation

The Principal Instructional Management Rating Scale (PIMRS) developed by Philip Hallinger, measures the frequency with which principals engage in specific instructional management practices. The PIMRS divides instructional management into three broad dimensions: defining the school mission, managing curriculum and instruction, and promoting school climate. Within each dimension, job functions of the principal's behavior are identified. Job functions are identified as subscales within each dimension. Each subscale includes items that are descriptive of critical job-related behaviors. The items are statements of job-related behaviors on which respondents can base their appraisal of an individual's

frequency of performance within a given subscale of the job. Teachers will be asked to decide the extent to which they think their principal has demonstrated a particular job behavior, selecting from a Likert Scale which includes a range from "almost never" (1) to "almost always" (5). Only teachers who have worked with the principal for a full year will be asked to complete the PIMRS. The PIMRS does not measure principal effectiveness. The rating scale does assess the frequency with which a principal engages in specific instructional management practices.

The PIMRS was selected for this study because it met the following requirements (Hallinger, 1992):

1. The instrument focuses on specific job related behaviors.
2. The behavioral components of the instrument are drawn from research related to principal effectiveness as well as from current practice.
3. The instrument is useful for a variety of purposes including principal evaluation, staff development, research, and district policy analysis (p. 10).

Other researchers are using the scales to provide a reliable, valid method of collecting data on principal instructional management behavior. At the time of this study, over thirty research projects had been completed using the PIMRS. It should be noted that the author has given written permission to use the PIMRS in this study.

The reliability and validity of this instrument is reported by Hallinger and Murphy (1985, pp. 225-226):

1. Content Validity. Items making up each subscale of the instrument must be relevant to the critical requirements of the job; each item assigned to a subscale achieved a minimum average agreement of .80 among a group of raters.
2. Reliability (Cronbach's alpha). Subscales achieved a reliability coefficient of at least .75 as a test of the instrument's internal consistency, ensuring that the instrument is reliable for both research and evaluation.
3. Validity (analysis of variance). The subscales should discriminate among principals; variance in principal ratings within schools is, in most cases, less than the variance in ratings of principals between schools at a significance level of .05.
4. Construct validity (subscale intercorrelation). Groups of items within a subscale correlate more strongly with each other than with other subscales.
5. Construct validity (documentary support). An analysis of school documents related to the instructional management behavior of principals generally yield instructional management profiles similar to those obtained from teachers with the questionnaire. An outline of the PIMRS reliability and validity provides additional information.

Table 1. Summary of Criteria Used to Assess the Adequacy of the Instructional Management Rating Subscales

Subscale	Content Validity	Relia- bility	Dicri- minant Validity	Construct Intercor- relations	Validity Document Analysis
			F Value/ Significance		
Frames Goals	.91	.89	6.01 .0000	.89	Yes
Communicates Goals	.96	.89	6.12 .0000	.89	Yes
Monitors Student Progress	.88	.90	2.66 .0087	.90	Yes
Supervision/Evaluation of Instruction	.80	.90	2.23 .0266	.90	Mixed
Curricular Coordination	.80	.90	3.13 .0024	.90	---
Protects Instructional Time	.85	.84	2.84 .0052	.84	---
Visibility	-	.81	3.12 .0025	.81	---
Incentives for Teachers	1.00	.78	3.49 .0010	.78	---
Professional Development	.80	.86	1.46 .1729	.86	Mixed
Academic Standards	.95	.83	1.78 .0829	.83	---
Incentives for Learning	.94	.87	4.18 .0001	.87	Yes

Information provided by Philip Hallinger in the Resource Manual:  
The Principal Instructional Management Rating Scale

### Research Design

This was a time-bound, cross-sectional study using a survey methodology to investigate the relationships between the instructional management behavior of elementary school principals and school size, socio-economic status of students, gender of principals, and administrative experience (Borg & Gall, 1989). School size, socio-economic status of students, gender of principals, and administrative experience were the independent variables in the study. Teacher perceptions of principal behaviors as measured by the PIMRS was the dependent variable. The PIMRS was used to measure the frequency with which principals engage in specific instructional practices. The PIMRS was used as an appraisal instrument to assess the instructional management of the building principal by the school instructional staff.

### Data Collection

The researcher submitted a Human Subjects Research Review proposal to the subcommittee and received approval before proceeding with data collection. The superintendents of the districts selected for the study were contacted by phone by the researcher prior to mailing of materials (first step). An explanation of the study was given to each superintendent and permission to distribute the survey was obtained from the district superintendent. Once permission and cooperation was obtained, a follow-up letter was sent to

the superintendent (second step). A letter of explanation was sent to the principal a few days before teacher surveys were mailed (third step). Teachers were selected at random by identifying the first, third, fifth, seventh, ninth, eleventh, thirteenth, fifteenth, seventeenth, and nineteenth teacher from an alphabetical listing of the staff. The survey was mailed to each teacher with a self-addressed envelope to be returned directly to the researcher. To alleviate fears that evaluation information was being collected, confidentiality of all individual responses was strictly maintained. Only aggregated statistics were used in the study. Study results were available to principals on request.

Drake University letterhead with the name of a professor from the graduate school of education and the researcher was used in the cover letter. The mailing included a cover letter, survey, and postage paid return envelope (fourth step). Within one week, a follow-up postcard was sent to all teachers (fifth step). The goal of the data collection process was to have 450 surveys returned, representing forty-five ( $N=45$ ) schools, fifteen in each school size category.

Forty-five district superintendents were contacted by phone before surveys were sent to teachers. Every superintendent contacted agreed to allow the elementary school in his/her district to participate in the study.

Many of the superintendents asked the researcher to contact the principal to discuss the survey. The researcher made phone contact with each principal whenever the request was made by the district superintendent. With one exception, the principals agreed to allow teachers on their staff to participate in the study. Forty-four elementary schools were included in the study. Thirteen of the forty-four or 30 percent of the building principals were female. Ten teachers were selected at random within each building and 440 surveys were sent to the respondents. Within five weeks of the initial mailing, 365 surveys were returned to the researcher, resulting in an 83% return rate for the study. Twenty-two first year teachers were identified as respondents and their surveys were eliminated, resulting in a total of 343 surveys included in the data analysis. Three schools had five of ten surveys returned, six schools had six of ten surveys returned, and the remaining thirty-five schools had seven or more surveys included in the data analysis (Refer to Table 14, p. 98).

#### Data Analysis

This study attempted to determine whether there were relationships between school size, socio-economic status of students, gender of the principal, administrative experience, and the instructional management behavior of the principal.

Specifically, the research questions sought to answer the following:

1. Is there a relationship between the elementary principal's ability to define the school mission and school size, SES, gender of the principal, and administrative experience? This question was examined using multiple regression analysis to express the degree of relationship between each independent variable and the Framing the School Goals and Communicating the School Goals subscales scores of the PIMRS.
2. Is there a relationship between the elementary principal's ability to manage the instructional program and school size, SES, gender of the principal, and administrative experience? This question was examined using multiple regression analysis to express the degree of relationship between each independent variable and the Supervising & Evaluating Instruction, Coordinating the Curriculum, and Monitoring Student Progress subscales scores of the PIMRS.
3. Is there a relationship between the elementary principal's ability to promote a positive school climate and school size, SES, gender of the principal, and administrative experience? This question was examined using multiple regression analysis to express the degree of relationship between each independent variable and the five subscales scores of the school climate category of the



PIMRS: Protecting Instructional Time, Maintaining High Visibility, Providing Incentives for Teachers, Promoting Professional Development, and Providing Incentives for Learning.

Since there were multiple respondents for each school, a mean score for each subscale was calculated first for each teacher. Then the average of all scores on the subscale was used to obtain a grand mean score for the school. A distribution of averages was used to study the range of teacher perceptions.

Multiple regression analysis was used to determine if the independent variables were related to the dependent variable. Regression coefficients and their significance levels were reported. Critical values assumed an alpha level of .05.

School size, socio-economic status, administrative experience and PIMRS subscales represented equal interval data. School size was represented by a range of values between 200 and 800. Socio-economic status of students was represented by the percentage of students in school who received free and reduced lunches. Administrative experience was represented by the number of years a principal had served at the building level. The Principal Instructional Management Rating Scale was represented by a range of values between one and five. Scoring for the PIMRS included a score for each of ten subscales and a single

composite score. Gender of the principal did not represent equal "interval" data and was not reported as interval data. Gender of the principal was treated as a dichotomous, or nominal variable, consisting of two values.

## CHAPTER 4

### Analysis of the Data

#### Overview

This chapter represents a summation of the data analysis used to investigate the relationship between instructional management behavior of elementary principals in Iowa and school size, socio-economic status of students, gender of the principal, and administrative experience of the principal. The chapter is divided into three sections. The first section describes how the data was reduced for analysis. The second section describes the results of the analysis in relation to the three research questions and null hypotheses. The third section examines the assumptions of the multiple regression analysis used in the study.

#### Data Reduction

The Principal Instructional Management Rating Scale (PIMRS) divides instructional management into three broad dimensions: defining the school mission, managing curriculum and instruction, and promoting school climate. Within each dimension, job functions of a principal's behavior are identified. Job functions are identified as subscales within each dimension. There are 10 subscales in the PIMRS. Each subscale includes five items that are descriptive of critical job-related behaviors.

The first dimension is defining the school mission. The two subscales within this dimension are Framing School

Goals and Communicating School Goals. The second dimension is managing curriculum and instruction. The three subscales within this dimension are Supervising & Evaluating Instruction, Coordinating the Curriculum, and Monitoring Student Progress. The last dimension is promoting school climate. There are five subscales within this dimension: Protecting Instructional Time; Maintaining High Visibility; Providing Incentives for Teachers; Promoting Professional Development; and Providing Incentives for Learning.

To prepare the data for analysis, mean subscale scores for each teacher were calculated by averaging scores on the five items within each subscale. Then mean scores for each subscale were computed for the school by averaging scores of all teacher responses. Finally, a PIMRS school composite score was computed for each school by summing the mean scores of the subscales.

Multiple regression analysis was performed to investigate the relationship between the dependent variable scores on the PIMRS and independent variables school size, socio-economic status of students, gender of the principal, and administrative experience of the principal. The SPSS-X computer program was used for data analysis.

Step-wise selection of independent variables was employed in the regression analysis. The first independent variable entered into the equation was the variable with the

greatest positive or negative correlation with the dependent variable (Norusis, 1988). In this case, either school size, socio-economic status, gender, or administrative experience was entered into the equation first, depending upon the size of the correlation with the PIMRS. To determine if an independent variable was entered at all, the significance level of F was compared to a predetermined criteria (Norusis, 1988). In this study, the established criteria was ' $P \leq .05$ '. The independent variable entered the equation only if the probability identified in the F test was less than or equal to .05.

Table 2 reports the correlations between the PIMRS subscales and each independent variable. Table 3 reports the correlations between the PIMRS composite and each independent variable. Tables 4 through 13 summarize the tests for statistical significance for the first independent variable in each regression equation. The tables include the computed F value and significance level associated with the dependent variable. In addition, R,  $R^2$ , adjusted  $R^2$ , and standard error of the estimate are reported. Table 14 includes the response rates of the teachers who returned the PIMRS.

## Results

### Analysis of Subscale Means

Research Question 1: Is there a relationship between the elementary principal's ability to define the school

mission and school size, SES, gender of the principal, and administrative experience? To answer this question, a multiple regression analysis was performed. The only independent variable that was statistically significant ( $'P' \leq .05$ ) was the administrative experience of the principal. This was true for both Framing the School Goals and Communicating the School Goals. Table 2 reveals an inverse relationship between the administrative experience of the principal and Framing the School Goals ( $R = -.379$ ) and Communicating the School Goals ( $R = -.383$ ) subscales of the PIMRS.

Research Question 2: Is there a relationship between the elementary principal's ability to manage the instructional program and school size, SES, gender of the principal, and administrative experience? To answer this question, a multiple regression analysis was performed. The only independent variable that was statistically significant ( $'P' \leq .05$ ) was the administrative experience of the principal. This was true for Supervising & Evaluating Instruction, Coordinating the Curriculum, and Monitoring Student Progress. Table 2 reveals an inverse relationship between the administrative experience of the principal and Supervising & Evaluating Instruction ( $R = -.366$ ), Coordinating the Curriculum ( $R = -.303$ ), and Monitoring Student Progress ( $R = -.389$ ) subscales of the PIMRS.

Research Question 3: Is there a relationship between the elementary principal's ability to promote a positive school climate and school size, SES, gender of the principal, and administrative experience? To answer this question, a multiple regression analysis was performed. The only independent variable that was statistically significant ( $P \leq .05$ ) for three of the subscales was administrative experience of the principal. This was true for Protecting Instructional Time, Providing Incentives for Teachers, and Promoting Professional Development. Table 2 reveals an inverse relationship between the administrative experience of the principal and Protecting Instructional Time ( $R = -.344$ ), Providing Incentives for Teachers ( $R = -.311$ ), and Promoting Professional Development ( $R = -.322$ ) subscales of the PIMRS. The only independent variable that was statistically significant ( $P \leq .05$ ) for the remaining subscales was school size. Table 2 reveals an inverse relationship between school size and the Providing Incentives for Learning ( $R = -.424$ ) subscale of the PIMRS. There were no independent variables with a statistically significant correlation to the Maintaining High Visibility subscale of the PIMRS.

#### Analysis of School Composite Scores

A distribution of PIMRS subscale averages was used to examine the range of teacher perceptions. The range of subscale averages was 3.01-3.87. The three subscales with

the lowest averages across the sample of schools in the study (N=44) were: Providing Incentives for Teachers (3.01); Monitoring Student Progress (3.04); and Providing Incentives for Learning (3.12). The highest subscale average in the study was Promoting Professional Development (3.87).

The Principal Instructional Management Rating Scale (PIMRS) composite score was also examined to investigate the relationship between the dependent variable and school size, socio-economic status of students, gender of the principal, and administrative experience. The only independent variable that was statistically significant ( $P \leq .05$ ) was the administrative experience of the principal. Table 3 reveals an inverse relationship ( $R = -.419$ ) between the administrative experience of the principal and the PIMRS composite score.



Table 2. Correlation Matrix for the Relationship Between PIMRS Subscales and Independent Variables

PIMRS Subscales	SCHOOL SIZE	SOCIO- ECONOMIC STATUS	GENDER	ADMIN. EXPERIENCE
Frames School Goals	.082	-.043	.214	-.379
Communicates School Goals	-.015	-.075	.189	-.383
Supervises and Evaluates Instruction	-.029	.065	.160	-.366
Coordinates Curriculum	.022	.092	.153	-.303
Monitors Student Progress	-.036	.062	.172	-.389
Protects Instruction Time	.057	.064	.136	-.344
Maintains High Visibility	-.172	-.029	-.007	-.192
Provides Incentives for Teachers	-.110	-.149	.218	-.311
Promotes Professional Development	.062	-.006	.236	-.322
Provides Incentive for Learning	-.424	-.038	.070	-.210

'P'  $\leq$  .05

Table 3. Correlation Matrix for the Relationship Between  
PIMRS Composite and Independent Variables

	SCHOOL SIZE	SOCIO- ECONOMIC STATUS	GENDER	ADMIN. EXPERIENCE
PIMRS Composite	-.082	.004	.201	-.419

'P'  $\leq$  .05

Null Hypothesis 1: There is no relationship between the elementary principal's ability to define the school mission and school size, SES, gender of the principal, and administrative experience. The correlations between the Framing the School Goals and Communicating the School Goals subscales and administrative experience were  $-.379$  and  $-.383$ . Tables 4 and 5 indicate that the likelihood of obtaining correlations this large on the basis of chance were  $.0112$  and  $.0102$  and, therefore, highly improbable. The probability of computed correlations between the subscales and school size, SES, and gender of the principal were greater than  $.05$ . Consequently, the researcher fails to reject the null hypothesis for school size, SES, and gender of the principal. The researcher rejects the remaining null hypothesis and concludes that there is a significant inverse relationship between administrative experience and the principal's ability to define the school mission.

Null Hypothesis 2: There is no relationship between the elementary principal's ability to manage the instructional program and school size, SES, gender of the principal, and administrative experience. The correlations between the Supervising & Evaluating Instruction, Coordinating the Curriculum, and Monitoring Student Progress subscales and administrative experience were  $-.366$ ,  $-.303$ , and  $-.389$ . Tables 6, 7, and 8 indicate that the likelihood of obtaining correlations this large on the basis of

chance were .0144, .0453, and .0091 and, therefore, highly improbable. The probability of computed correlations between the subscales and school size, SES, and gender of the principal were greater than .05. Consequently, the researcher fails to reject the null hypothesis for school size, SES, and gender of the principal. The researcher rejects the remaining null hypothesis and concludes that there is a significant inverse relationship between administrative experience and the principal's ability to manage the instructional program.

Null Hypothesis 3: There is no relationship between the elementary principal's ability to promote a positive school climate and school size, SES, gender of the principal, and administrative experience. There were no independent variables that met the criteria for entry into the equation for the Maintaining High Visibility subscale of the PIMRS. School size was the only variable to meet the criteria for the Providing Incentives for Learning subscale. The correlation between the Providing Incentives for Learning subscale and school size was  $-.424$ . Table 12 indicates that the likelihood of obtaining a correlation this large on the basis of chance was .0042 and, therefore, highly improbable. Administrative experience met the criteria for three subscales. The correlations between administrative experience and the Protecting Instructional Time, Providing Incentives for Teachers, and Promoting

Professional Development subscales of the PIMRS were  $-.344$ ,  $-.311$ , and  $-.322$ . Tables 9, 10, and 11 indicate that the likelihood of obtaining correlations this large on the basis of chance were  $.0224$ ,  $.0400$ , and  $.0330$ , and therefore, highly improbable. Four of the five subscales reported correlations and probability levels that were unlikely to reflect relationships based on chance. Therefore, the researcher rejects the null hypothesis for school size and administrative experience and concludes that there is a significant inverse relationship between school size, administrative experience, and the principal's ability to promote a positive school climate. The researcher fails to reject the null hypothesis for SES and gender of the principal.

Administrative experience was the only independent variable to meet the criteria for entry into the equation when using the PIMRS composite score. The correlation between the Principal Instructional Management Rating Scale composite score and administrative experience was  $-.419$ . Table 13 reveals a significance level of  $.0046$ . The likelihood of obtaining a correlation this large on the basis of chance is highly improbable.

Table 4. Multiple Regression Analysis for Framing Schools Goals and Administrative Experience

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Multiple R	.37909	F = 7.04870
R Square	.14371	Signif F = .0112
Adjusted R Square	.12332	
Standard Error	.51133	

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'P'  $\leq$  .05

Table 5. Multiple Regression Analysis for Communicating School Goals and Administrative Experience

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Multiple R	.38327	F = 7.23204
R Square	.14690	Signif F = .0102
Adjusted R Square	.12659	
Standard Error	.45947	

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'P'  $\leq$  .05

Table 6. Multiple Regression Analysis for Supervising &amp; Evaluating Instruction and Administrative Experience

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Multiple R	.36646	F = 6.51543
R Square	.13430	Signif F = .0144
Adjusted R Square	.11368	
Standard Error	.50404	

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'P'  $\leq$  .05

Table 7. Multiple Regression Analysis for Coordinating the Curriculum and Administrative Experience

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Multiple R	.30339	F = 4.25778
R Square	.09204	Signif F = .0453
Adjusted R Square	.07043	
Standard Error	.50076	

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'P'  $\leq$  .05

Table 8. Multiple Regression Analysis for Monitoring Student Progress and Administrative Experience

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Multiple R	.38880	F = 7.47962
R Square	.15117	Signif F = .0091
Adjusted R Square	.13096	
Standard Error	.52147	

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'P'  $\leq$  .05

Table 9. Multiple Regression Analysis for Protecting Instructional Time and Administrative Experience

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Multiple R	.34370	F = 5.62608
R Square	.11813	Signif F = .0224
Adjusted R Square	.09713	
Standard Error	.43283	

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'P'  $\leq$  .05

Table 10. Multiple Regression Analysis for Providing Incentives for Teachers and Administrative Experience

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Multiple R	.31089	F = 4.49373
R Square	.09665	Signif F = .0400
Adjusted R Square	.07514	
Standard Error	.52759	

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'P'  $\leq$  .05

Table 11. Multiple Regression Analysis for Promoting Professional Development and Administrative Experience

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Multiple R	.32211	F = 4.86219
R Square	.10376	Signif F = .0330
Adjusted R Square	.08242	
Standard Error	.47924	

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'P'  $\leq$  .05

Table 12. Multiple Regression Analysis for Providing Incentives for Learning and School Size

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Multiple R	.42357	F = 9.18267
R Square	.17941	Signif F = .0042
Adjusted R Square	.15987	
Standard Error	.48974	

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'P'  $\leq$  .05



Table 13. Multiple Regression Analysis for PIMRS Composite and Administrative Experience

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Multiple R	.41922	F = 8.95513
R Square	.17575	Signif F = .0046
Adjusted R Square	.15612	
Standard Error	3.82153	

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'P'  $\leq$  .05

Table 14. Response Rate of Teachers Returning PIMRS (Excluding New Teachers)

School	Number of Surveys Sent	Total Returned
1	10	6 ( 60%)
2	10	6 ( 60%)
3	10	9 ( 90%)
4	10	10 (100%)
5	10	7 ( 70%)
6	10	9 ( 90%)
7	10	9 ( 90%)
8	10	8 ( 80%)
9	10	6 ( 60%)
10	10	9 ( 90%)
11	10	7 ( 70%)
12	10	7 ( 70%)
13	10	7 ( 70%)
14	10	10 (100%)
15	10	6 ( 60%)
16	10	9 ( 90%)
17	10	7 ( 70%)
18	10	9 ( 90%)
19	10	10 (100%)
20	10	9 ( 90%)
21	10	7 ( 70%)
22	10	8 ( 80%)
23	10	8 ( 80%)
24	10	5 ( 50%)
25	10	9 ( 90%)
26	10	9 ( 90%)
27	10	10 (100%)
28	10	7 ( 70%)
29	10	9 ( 90%)
30	10	9 ( 90%)
31	10	8 ( 80%)
32	10	7 ( 70%)
33	10	6 ( 60%)
34	10	6 ( 60%)
35	10	5 ( 50%)
36	10	5 ( 50%)
37	10	8 ( 80%)
38	10	9 ( 90%)
39	10	7 ( 70%)
40	10	9 ( 90%)
41	10	8 ( 80%)
42	10	7 ( 70%)
43	10	9 ( 90%)
44	<u>10</u>	<u>8 ( 80%)</u>
Total	440	343 ( 78%)

### Assumptions

The assumptions of regression analysis were examined by the researcher to address threats to statistical significance found in the study. The assumptions examined include: linearity and homogeneity of variance, normal distribution of the dependent variable and, independent selection of paired scores.

To determine if the assumptions of data analysis violated the assumptions of multiple regression, distributions of residuals were plotted. Residuals were plotted to examine the differences between observed values in the study and values predicted by the linear regression model. According to Norusis (1988), "if the assumptions of linearity and homogeneity of variance are met, there should be no relationships between predicted and residual values" (p. 158).

Scatterplots were examined for each independent variable entered into the regression equation. There were no patterns detected between the observed residual values and the predicted values and, therefore, no apparent violations of the assumption of linearity in the regression model. In addition, the spread of residual values did not appear to increase or decrease with the predicted values. The researcher assumed that there was constant variance of  $Y$  for all values of  $X$ . Therefore, no apparent violations of

the assumption of equal variance were evident in the regression analysis.

Regression histograms were also provided in the data analysis. The histograms portray the observed number of residuals in each interval and the number expected in a normal distribution with the same mean and variance as the residuals (Norusis, 1988). The residuals in the data analysis did exhibit approximate normality, but contained some deviations in the distribution. This conclusion is not considered by the researcher to be a violation of the normality assumption. Some deviation in the distribution is expected due to sampling variation (Norusis, 1988). Therefore, this assumption was retained.

The PIMRS scores were computed from teachers' ratings of the principal in the building. The schools included in the study were selected using a table of random numbers. Once the sample schools were chosen, teachers in each school were selected by identifying the first, third, fifth, seventh, ninth, etc., teacher from an alphabetical listing of the faculty. As a result, the PIMRS scores from teachers within each building were completely independent. However, Table 14 reveals that not all teachers returned the surveys. It is possible that the teachers who failed to return them had some homogeneity of opinion that is missing from the data. It is possible that missing data may have affected the results of the study. Because these teachers

self-selected out of the survey process and chose not to participate represents a threat to the validity of the study. However, as seen in Table 14, three schools (7 percent of the total) had 50 percent of the surveys returned; three schools (7 percent of the total) had 60 percent of the surveys returned; and eight schools (18 percent of the total) had 70 percent of the surveys returned. The total number of schools with less than 80 percent return rate was fourteen or 32 percent of the total number of school in the study. Thus, only one-third of the schools had a smaller return rate than the total aggregate return rate for the study.

## CHAPTER 5

### Summary, Conclusions, Discussion and Recommendations

#### Overview

The final chapter is divided into five sections. The sections include a summary of the study, interpretations of the data, limitations of the study, implications for professional practice, and recommendations for further research.

#### Summary of the Study

The purpose of the study was to examine the factors that influence the instructional management behavior of the principal. The study examined school size, socio-economic status (SES) of students, gender of the principal, and administrative experience, then assessed the degree to which these factors were associated with the instructional management behavior of the elementary school principal as measured by the PIMRS. The results of the data analysis in this study indicate that instructional management behavior is related to school size and administrative experience.

#### Interpretations of the Data

##### School Size

The Principal Instructional Management Rating Scale (PIMRS) subscale scores for Providing Incentives for Learning decreased as school size increased. This finding was considered noteworthy by the researcher because it was represented by the highest correlation coefficient between

the dependent variable (PIMRS) and any independent variable in the study. Equally noteworthy is the fact that four of the five subscales in the positive school climate dimension of the PIMRS were not associated with school size.

Why would one subscale alone in the school climate dimension demonstrate a significant inverse relationship to school size? Unlike other subscales in the school climate dimension, Providing Incentives for Learning pertains directly to students and the recognition of their accomplishments in the classroom.

In their study on the effects of school size on aspects of the individual student personality, Campbell, Cotterell, Robinson, and Sadler (1981) found that it was more difficult to maintain high levels of student participation and provide a warm, challenging learning environment in elementary schools with enrollments above 700. Some larger high schools have taken steps to reduce their size by dividing themselves into smaller "houses" within a school. In this setting, students have an opportunity for more one-to-one contact and personal instruction. This arrangement is an effort to improve the climate, discipline, and instructional effectiveness of the high school (Lezotte, Hathaway, Miller, Passalacqua, & Brookover, 1980).

Chambers (1981) indicated that there were some economies to be gained from increasing the size of a school; however, increases beyond a certain level resulted in a

reduction in the degree of interaction, communication, and coordination of activities between children, teachers, and administrators. As Blau (1972) pointed out, "social integration requires subunits small enough for regular personal contacts among members (p. 13).

A positive school climate is one of the essential characteristics of effective schools. As the instructional leader of the building, the principal communicates high expectations for students and teachers and keeps the educational program emphasis on academic achievement and student learning. Students must be recognized for their accomplishments. School size may be an organizational factor that influences the instructional management behavior of the principal. In particular, the principal's ability to provide incentives for students to learn appears to decrease as school size increases.

Four of the five subscales in the school climate dimension were not related to school size at least as categorized for this study. Of the five subscales in the two remaining dimensions, none were found to be statistically significant in relation to school size. The results of this study do not support the assumption that school size influences the principal's ability to define the school mission or manage the instructional program. With the exception of providing incentives for learning, results of this study will conclude that school size does not appear



to be related to the instructional management behavior of principals.

#### Socio-Economic Status

In a national study of principals and their work, Sally, McPherson, and Baehr (1979) found that principals described their jobs differently, depending on the socio-economic level of their students with whom they worked. One premise of the research was that the definition of the job (the principal's description of the important functions in his/her work) would deviate with the changing conditions of operation (environmental constraints). The premise was supported by study findings that socio-economic status and ethnic composition of the student body had a significant impact on the way principals described their jobs.

Hallinger and Murphy (1986, 1987b) found that student background characteristics influenced the instructional leadership style of principals. The authors reported that principals in effective low SES schools and effective high SES schools demonstrate varying leadership styles depending on the school setting in which the behavior takes place. The social context of the school appeared to have an impact on the instructional leadership style of the principal; however, principals in both low and high SES schools were considered effective principals.

The results of this study do not support the assumption that the socio-economic status of students is associated

with the instructional management behavior of the principal. Of the ten subscales included in the Principal Instructional Management Rating Scale, none were found to be significant in relation to the socio-economic status of students. Student background characteristics did not influence the principal's ability to define the school mission, manage the instructional program, or promote a positive school climate. The results of this study will conclude that the socio-economic level of the students does not appear to be related to the instructional management behavior of principals. Interestingly, student background characteristics and their effect on school performance were the paramount issues in the debate that began the effective school research movement more than twenty years ago.

#### Gender of the Principal

When Gross and Trask (1976) examined the sex of administrators to determine if gender influenced the performance and operation of schools, some differences were found, but no differences were evident in the degree of importance men and women placed on instruction. In their occupational study of principals, Salley, McPherson, and Baehr (1979) concluded that viewing gender as an "essential attribute for saving a school in trouble appeared to be unsupportable" (p. 36).

The results of this study do not support the assumption that gender is associated with the instructional management

behavior of the principal. Of the ten subscales included in the Principal Instructional Management Rating Scale, none were found to be significant in relation to the gender of the principal. Gender did not influence the principal's ability to define the school mission, manage the instructional program, or promote a positive school climate. This study will conclude that gender does not appear to be related to the instructional management behavior of principals.

#### Administrative Experience

The value of administrative experience in relation to the performance of the principal is not as evident as one might assume. In their research of administrative performance and personality, Hemphill, Griffiths, and Frederiksen (1962) found little relationship between administrative experience and "any measure of performance in the simulated school situation" (p. 352). The authors also stated that "concern for or sensitivity to instructional problems appears unrelated to the amount of administrative experience" (p. 335). However, administrative experience is a predominate factor used by school boards and superintendents when selecting elementary school principals (Hemphill et al., 1962).

Results in the Salley, McPherson, and Baehr (1979) study were equally inconclusive. When principals were asked to identify the important job functions of their work,

experience was "not a differentiating factor in the principal's description of his or her work" (p. 36). Both experienced and inexperienced principals described their work in a similar fashion. This led the authors to conclude that more experienced principals were not performing "any crucial or different functions" than inexperienced principals.

Gross and Heriott (1965) studied Executive Professional Leadership (EPL) and elementary school principals and found that experienced principals did not exhibit greater EPL than their inexperienced counterparts. The authors defined EPL as "the efforts of an executive of a professionally staffed organization to conform to a definition of his/her role that stresses the obligation to improve the quality of staff performance" (p. 22). They went on to say:

Many principals as well as their administrative superiors should ponder on our data on the association between experience in the principalship and EPL. The basic trend of the data in all three tests of this relationship is negative. Contrary to assumptions common in educational circles, the more experienced principals, as a rule, do not outdo their less experienced colleagues in EPL (p. 155).

Interestingly, principals themselves place a great deal of importance on experience. In a national survey of 2,414 principals, more than 96% indicated that on-the-job experience as a principal had "much value" to their success (Doud, 1989). In a similar survey ten years earlier,

principals gave a comparable response (Pharis & Zakariya, 1978). Although the surveys did not focus on instructional management, it is evident that principals think experience on the job is very important.

The results of this study support the assumption that administrative experience is associated with the instructional management behavior of the principal. Of the ten subscales included in the Principal Instructional Management Rating Scale, eight were found to be significant in relation to administrative experience. Even more notable was the fact that the correlation coefficients reveal inverse relationships between administrative experience and all eight subscales. As administrative experience increased, the principal's ability to define the school mission, manage the instructional program, and promote a positive school climate decreased. When teachers were asked to rate the instructional management practices of principals, experienced principals received significantly lower ratings than less experienced colleagues. In addition, when the PIMRS composite was examined, administrative experience was the only independent variable that was statistically significant. There was an inverse relationship between the administrative experience of the principal and the PIMRS composite score. This study will conclude that, as administrative experience increases, the

frequency with which principals engage in specific instructional management practices appears to decrease.

#### Limitations of the Study

The study did not include elementary schools with 200 or fewer students. Schools with fewer than 200 students are more likely to have principals with other duties (teacher, counselor, etc.) or responsibilities in more than one building. The elimination of schools with 200 or fewer students limited the scope of the study. In addition, elementary schools in districts with subject area curriculum coordinators with district-wide responsibilities were also eliminated from the sample population. These schools were not included because the impact of curriculum coordinators on the instructional behavior of principals at the building level could not be measured. It has not been determined what the principal's role as the instructional leader is in relation to other instructional leaders or their influence on instructional practices in the building. In addition to curriculum specialists, principals have teachers on their faculty who demonstrate expertise in one curriculum area or another. Principals also have teachers who are very knowledgeable about instructional practices and share this expertise with other teachers in the building on an on-going basis. How do other instructional leaders in the building affect staff perceptions of the principal as an

instructional leader? The scope of this study did not address this question.

This study also used a single measure of principal instructional effectiveness, the Principal Instructional Management Rating Scale. The rating scale measures the frequency with which principals engage in instructional management practices as perceived by teachers. Teachers' perceptions of individual principal behavior may differ significantly from the perceptions of other educators. Different sources of data were not used in the study. On-site interviews with some study participants or an examination of building documents (mission statements, instructional goals, staff meeting agendas, staff memos, community newsletters, etc.) may have been beneficial. This data may have been helpful as part of an overall analysis of principals with varying degrees of administrative experience. Why does the frequency of instructional management behavior appear to decrease as administrative experience increases? Although the study identified the disparity, it does not address the reasons.

Not all of the teacher surveys were returned to the researcher. Whenever subjects drop out of a study, they do not necessarily do so in a random fashion. They generally choose not to participate for a reason. It may be that these teachers chose not to return the surveys because they lacked the time necessary to complete them. It is also

possible that the surveys created concern or anxiety about rating principals' behavior, or that teachers thought this information should be held in confidence and not shared with an outside source. Do these teachers represent a homogenous group? If the survey results of this group were included in the data analysis, would the study results look different? The mortality of subject participation may be a limiting factor of the study.

#### Implications for Professional Practice

A distribution of subscale averages was used to examine the range of teacher perceptions of the instructional management behavior of elementary principals. The range of the ten subscale averages on a scale of one to five was 3.01-3.87. Two of the three lowest averages across the sample of schools in the study (N=44) were Providing Incentives for Teachers and Providing Incentives for Learning. The Providing Incentives for Teachers subscale was also statistically significant in relation to administrative experience, while Providing Incentives for Learning was statistically significant in relation to school size. Both subscales are part of the promoting a positive school climate dimension. Regardless of the measure, the data seems to support the concept that principals provide incentives for teachers and students with less frequency than other indicators in the positive school climate dimension. If principals do not recognize the



accomplishments of staff and students as much as they should, it may be a perception that is widely shared among teachers. This information may be useful to those involved who are involved in professional development programs. Principals participating in this study may also want to use this information to gain a greater understanding of their own instructional management behavior. Principals themselves may be the best source of information on ways to increase incentives for teachers and students.

According to Lipham and Hoeh (1974), "school climate is the organizational personality of the school" (p. 7). Principals alone cannot ensure an effective learning climate; however, principals can help improve or impede progress toward that end (Lezotte et al. 1980, Sarason, 1971). Of all the competencies effective principals possess, the creation of a positive school climate for staff and students may be the most important. Effective principals make a difference to teachers and children by maintaining a supportive environment in which to learn. They maintain strong, collegial relationships with their staff and take advantage of opportunities to praise teachers and students for their accomplishments and achievements.

Certainly the most compelling finding in the study is that, as administrative experience increases, the frequency with which principals engage in specific instructional

management practices appears to decrease as measured by the PIMRS. The fact that the PIMRS composite score and eight of ten subscales revealed an inverse relationship between administrative experience and the principal's ability to define the school mission, manage the instructional program, and promote a positive school climate, is difficult to explain in conventional terms.

Getzels (1958) concluded that the observed behavior of individuals in an organization is based on the interaction between the institution and personal dimensions. The Getzels' model suggests role conflicts whenever there is a discrepancy between the expectations attached to the role and the needs of the individual. Behavior, as seen by an observer, and about which inferences are made about an individual's performance, is a function of both the situation and the individual (Hemphill, Griffiths, & Frederiksen, 1962). Erez and Goldstein (cited in Boyan, 1987) found that role stress that resulted from conflicting expectations "led principals to emphasize their administrative and managerial duties and to neglect their instructional responsibilities" (p. 83). In her study, Metz (1978) observed that teachers thought the principal's role was fundamental to the character of the entire school. The author also concluded:

Principals appear to be caught between having direct responsibility without direct control over events. The principals...were keenly aware that they were responsible both for imaginative academic education and for safety and order in every part of the school. They were also aware that this double responsibility entailed practical contradictions and the necessity for choice. (p. 189)

The principalship is a demanding and complex position. Principals must take a variety of roles which place many demands on their time. Vass and Sloan (1992) conducted a review of the literature on job functions of principals. The categories included curriculum and instructional supervision; staff development; staff and community relations; supervision of support staff; budget activities; student discipline; student services; scheduling tasks; and general administrative duties. In Principals as Instructional Leaders, Vass and Sloan (1992) found that the perceptions of teachers concerning the time principals spent on curriculum and instructional program supervision and the amount of time reported by principals on the same activities differed significantly. Teachers did not perceive principals spending as much of their time on curriculum and instructional activities as principals themselves reported. The authors concluded the one reason for the difference may be that teachers have a narrow view of the principal's role and that the interaction between a classroom teacher and a principal tends to be directed toward the specific duties and responsibilities of the teacher.

Although conflicting roles, social structure, and organizational characteristics influence the behavior of principals, they do not explain why experienced principals engage in instructional management practices less frequently than their colleagues. Job functions of the principalship do not vary based on experience. Both experienced and inexperienced principals have the same opportunities to define the school mission, manage the instructional program, and promote a positive school climate.

It may be that less experienced principals attended more recent college and university training programs and, as a result, have received more current professional development on the importance of instructional leadership as the primary role of the principal. Colleges and universities may also be more adept at recruiting and selecting talented teachers to enter graduate programs for entry into the principalship. The final explanation is one that educators should not want to contemplate: the longer many principals are on the job, the less attention they give to curriculum, instruction, and supervision.

It is possible that organizational demands for administrative duties take precedence over the principal's need to act the instructional leader of the building. Over time, the school district "fits" principals into a mold that meets organizational needs but does not support the role of

principals as instructional leaders. Principals may simply be responding to what school districts really value.

The role of instructional leader may allow principals to thrive and grow professionally, but survival on the job may depend on sending reports to the district office on time, watching the budget, maintaining "good" relations with the staff and community, the appearance of the building, and keeping the superintendent informed. If this is true, what does this tell us about the culture of schools? Are the political and administrative functions of the principalship more important than the mission of the school? Can principals maintain their role as instructional leaders without changing the assumptions on which schools operate?

The results of this study seem to emphasize that administrative experience does not guarantee instructional leadership in the building. School policymakers may wish to take notice: the value of administrative experience in relation to instructional management is not evident by any measure. Even though administrative experience may not discriminate between effective and less effective principals, many districts continue to place a high degree of emphasis on experience. Hiring practices in many districts appear to favor candidates with experience. At the same time, districts want to hire administrators who possess strong instructional management skills. It is possible that experienced principals are hired for reasons

other than instructional management if they are perceived as proven disciplinarians or are "known quantities" in educational circles. If the primary role of the elementary principal is to act as the instructional leader of the staff, then any preference given to hiring experienced administrators has no evidence to support the practice, at least in the opinion of teachers as measured by this study. Further, if there is an inverse relationship between administrative experience and instructional management behavior, this represents a real dichotomy for many school districts. This conclusion is in direct conflict with conventional wisdom and current hiring practices in many districts in Iowa.

#### Recommendations for Further Research

The following recommendations for further research are included as part of this study:

1. This study focused on principals assigned to a single building. There are a significant number of elementary principals in Iowa who have responsibilities in more than one building. If principals are to effectively serve as the instructional leaders of the school staff, an investment of time, energy, and commitment is needed. An examination of principals with multiple building assignments may assume that administrators assigned to more than one building do not have the time to effectively serve as the instructional leaders of the staff. Although conventional wisdom would

indicate that a principal cannot serve two or more buildings effectively, there is little evidence to support this assumption. A study that investigates the relationship between principals with multiple building assignments and instructional management behavior may yield valuable information.

2. It is recommended that further research be conducted to help determine the principal's role as an instructional leader in relation to other instructional leaders. Some districts have coordinators who assist with curriculum, monitor student progress, and engage in other instructional management activities in the school. In addition, principals have teachers on their faculty who have expertise in curriculum and are very knowledgeable about instructional practices. What impact do these individuals have on instructional management practices in the building and how do they influence the perceptions of the staff concerning the principal as an instructional leader? What happens if grade levels, subject area curriculum, and standardized tests disappear from schools? What happens when technology begins to dramatically affect how students learn?

3. Since most studies have taken place at the elementary level, an investigation of the instructional management practices of secondary principals would provide important information. According to Gross and Herriott (1965), elementary principals interact more directly with teachers

than principals in junior and senior high schools. In a secondary setting, assistant principals, department heads, counselors, and other personnel may have an effect on instructional management practices. Similarities and differences between the work of elementary and secondary principals would provide an excellent basis for discussion. A revised PIMRS or a new instrument would need to be developed to accurately measure the secondary principal's role as an instructional leader.

4. If studies examine administrative experience as a factor related to the instructional management behavior of principals, various research methodologies should be considered, including qualitative research. In-depth interviews might help identify the reasons instructional management behavior appears to decrease as administrative experience increases. If the reasons can be identified, then recommendations can be made to help experienced principals maintain their instructional focus.

This study included only teacher perceptions of principal behavior as measured by the PIMRS. An examination of the relationships between the PIMRS and the observed behaviors of principals or on-site interviews with study participants may prove to be worthwhile. If principals lose their instructional focus over time, then how does the school organization influence this change, when does the process begin, and how long does it take? Does the school



"system" really value and reward instructional leadership or does the educational bureaucracy gradually "fit" principals into a mold that places more emphasis on administrative functions than instructional leadership? Is the principal's role as an instructional leader emphasized in the evaluation process? How can school organizations better support principals as instructional leaders? These questions may support the need for additional study of school organizations and the role of principals as instructional leaders.

If superintendents value instructional leadership, they must model the behavior themselves. In their study of instructional effective school districts, Murphy and Hallinger (1988) concluded that the instructional leadership role of the superintendent, with emphasis and attention given to curriculum and instruction, inspection of outcomes, and a high degree of coordination between the district, school, and classroom were the differentiating factors that "set these districts apart from many of their counterparts" (p. 180).

The most important aspects of leadership deal with social meanings in organizational culture (Sergiovanni, 1981). Leaders give attention to the things they value. If matters of curriculum and instruction are the highest priority, then these activities receive attention from the leader. According to Schein (1985), focusing attention on

the priorities of the organization is a powerful form of communication, especially if leaders are totally consistent in their behavior. Schein (1985) goes on to state that "it is the consistency of the behavior that is important, not the intensity of the attention" (p. 225). Superintendents must act as instructional leaders of their districts if principals are to be effective instructional leaders in their buildings.

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APPENDIX A

PRINCIPAL INSTRUCTIONAL MANAGEMENT RATING SCALE

## THE PRINCIPAL INSTRUCTIONAL MANAGEMENT RATING SCALE

**PART I:** Please provide the following information about yourself:

(A) School name: \_\_\_\_\_

(B) Years working with the current principal at the end of this school year:

\_\_\_\_ 1          \_\_\_\_ 5-9          \_\_\_\_ more than 15

\_\_\_\_ 2-4          \_\_\_\_ 10-15

(C) Years experience as a teacher at the end of this school year:

\_\_\_\_ 1          \_\_\_\_ 5-9          \_\_\_\_ more than 15

\_\_\_\_ 2-4          \_\_\_\_ 10-15

**PART II:** This questionnaire is designed to provide a profile of principal instructional leadership. It consists of 50 behavioral statements that describe principal job practices and behaviors. You are asked to consider each question in terms of your principal's job-related behavior over the past school year.

Your particular responses are anonymous and will be kept confidential. At no time will the original individual questionnaires be shared with your principal. Your responses will be combined with those of other teachers in order to develop a profile.

Read each statement carefully. Then circle the number that indicates the extent to which you feel your principal has demonstrated the specific job behavior or practice during the past school year.

For the response to each statement:

- 5 represents *Almost Always*
- 4 represents *Frequently*
- 3 represents *Sometimes*
- 2 represents *Seldom*
- 1 represents *Almost Never*

In some cases, these responses may seem awkward; use your judgement in selecting the most appropriate response to such questions.

Please circle only one number per question. Try to answer every question.

Thank you.

To what extent does your principal...?

### I. FRAME THE SCHOOL GOALS

Almost Never    Almost Always

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Develop a focused set of annual school-wide goals                                    | 1 | 2 | 3 | 4 | 5 |
| 2. Frame the school's goals in terms of staff responsibilities for meeting them         | 1 | 2 | 3 | 4 | 5 |
| 3. Use needs assessment or systematic methods to secure staff input on goal development | 1 | 2 | 3 | 4 | 5 |
| 4. Use data on student academic performance when developing the school's academic goals | 1 | 2 | 3 | 4 | 5 |
| 5. Develop goals that are easily translated into classroom objectives by teachers       | 1 | 2 | 3 | 4 | 5 |

### II. COMMUNICATE THE SCHOOL GOALS

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 6. Communicate the school's mission effectively to members of the school community  | 1 | 2 | 3 | 4 | 5 |
| 7. Discuss the school's academic goals with teachers at faculty meetings  | 1 | 2 | 3 | 4 | 5 |
| 8. Discuss the school's academic goals when making curricular decisions with teachers   | 1 | 2 | 3 | 4 | 5 |
| 9. Ensure that the school's academic goals are reflected in highly visible displays in the school (e.g., posters emphasizing reading or math) | 1 | 2 | 3 | 4 | 5 |
| 10. Refer to the school's goals in student assemblies   | 1 | 2 | 3 | 4 | 5 |

### III. SUPERVISE & EVALUATE INSTRUCTION

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 11. Ensure that the classroom priorities of teachers are consistent with the stated goals of the school | 1 | 2 | 3 | 4 | 5 |
| 12. Review student work products when evaluating classroom instruction                                  | 1 | 2 | 3 | 4 | 5 |

To what extent does your principal...?

Almost Never    Almost Always

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 13. Conduct informal observations in classrooms on a regular basis (informal observations are unscheduled, last at least 5 minutes, and may or may not involve written feedback or a formal conference) | 1 | 2 | 3 | 4 | 5 |
| 14. Point out specific strengths in teacher instructional practices in post observation feedback (e.g., in conferences or written evaluations)  | 1 | 2 | 3 | 4 | 5 |
| 15. Point out specific weaknesses in teacher instructional practices in post observation feedback (e.g., in conferences or written evaluations)   | 1 | 2 | 3 | 4 | 5 |

#### IV. COORDINATE THE CURRICULUM

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 16. Make clear who is responsible for coordinating the curriculum across grade levels (e.g. the principal or teacher-leader) | 1 | 2 | 3 | 4 | 5 |
| 17. Draw upon the results of school-wide testing when making curricular decisions  | 1 | 2 | 3 | 4 | 5 |
| 18. Monitor the classroom curriculum to see that it covers the school's curricular objectives                                | 1 | 2 | 3 | 4 | 5 |
| 19. Assess the overlap between the school's curricular objectives and the school's achievement tests                         | 1 | 2 | 3 | 4 | 5 |
| 20. Participate actively in the review of curricular materials   | 1 | 2 | 3 | 4 | 5 |

#### V. MONITOR STUDENT PROGRESS

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 21. Meet individually with teachers to discuss student academic progress                                | 1 | 2 | 3 | 4 | 5 |
| 22. Discuss the item analysis of tests with the faculty to identify curricular strengths and weaknesses | 1 | 2 | 3 | 4 | 5 |
| 23. Use test results to assess progress toward school goals   | 1 | 2 | 3 | 4 | 5 |

To what extent does your principal...?

Almost Never    Almost Always

24. Inform teachers of the school's performance results in written form (e.g., in a memo or newsletter)	1	2	3	4	5
25. Inform students of school's test results	1	2	3	4	5

#### VI. PROTECT INSTRUCTIONAL TIME

26. Limit interruptions of instructional time by public address announcements	1	2	3	4	5
27. Ensure that students are not called to the office during instructional time	1	2	3	4	5
28. Ensure that tardy and truant students suffer specific consequences for missing instructional time	1	2	3	4	5
29. Encourage teachers to use instructional time for teaching and practicing new skills and concepts	1	2	3	4	5
30. Limit the intrusion of extra- and co-curricular activities on instructional time	1	2	3	4	5

#### VII. MAINTAIN HIGH VISIBILITY

31. Take time to talk with students and teachers during recess and breaks	1	2	3	4	5
32. Visit classrooms to discuss issues with teachers and students	1	2	3	4	5
33. Attend/participate in extra- and co-curricular activities	1	2	3	4	5
34. Cover classes for teachers until a late or substitute teacher arrives	1	2	3	4	5
35. Tutor students or provide direct instruction to classes	1	2	3	4	5

To what extent does your principal...?

Almost Never    Almost Always

### VIII. PROVIDE INCENTIVES FOR TEACHERS

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 36. Reinforce superior performance by teachers in staff meetings, newsletters, and/or memos                   | 1 | 2 | 3 | 4 | 5 |
| 37. Compliment teachers privately for their efforts or performance  | 1 | 2 | 3 | 4 | 5 |
| 38. Acknowledge teachers' exceptional performance by writing memos for their personnel files                  | 1 | 2 | 3 | 4 | 5 |
| 39. Reward special efforts by teachers with opportunities for professional recognition                        | 1 | 2 | 3 | 4 | 5 |
| 40. Create professional growth opportunities for teachers as a reward for special contributions to the school | 1 | 2 | 3 | 4 | 5 |

### IX. PROMOTE PROFESSIONAL DEVELOPMENT

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 41. Ensure that in-service activities attended by the staff are consistent with the school's academic goals | 1 | 2 | 3 | 4 | 5 |
| 42. Actively support the use of skills acquired during in-service training in the classroom                 | 1 | 2 | 3 | 4 | 5 |
| 43. Obtain the participation of the whole staff in important in-service activities                          | 1 | 2 | 3 | 4 | 5 |
| 44. Lead or attend teacher in-service activities concerned with instruction                                 | 1 | 2 | 3 | 4 | 5 |
| 45. Set aside time at faculty meeting for teachers to share ideas or information from in-service activities | 1 | 2 | 3 | 4 | 5 |

### X. PROVIDE INCENTIVES FOR LEARNING

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 46. Recognize students who do superior academic work with formal rewards such as an honor roll or mention in the principal's newsletter | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

To what extent does your principal...?

Almost Never    Almost Always

47. Use assemblies to honor students for academic accomplishments or for behavior or citizenship	1	2	3	4	5
48. Recognize superior student achievement or improvement by seeing students in the office with their work	1	2	3	4	5
49. Contact parents to communicate improved or exemplary student performance or contributions	1	2	3	4	5
50. Support teachers actively in their recognition and/or reward of student contributions to and accomplishments in class	1	2	3	4	5